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Seagrave Fire Apparatus

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Detroit Speed

Clay Adkins II
Textron Systems

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New from Blue

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Visit **MillerWelds.com** for a fast and easy way to buy welding products for your home or shop.

Help me choose.

Finding the welding or cutting equipment that's right for you doesn't have to be complicated. Follow the steps below.

1 Pick the right process for the metals to be welded or cut.

Process skill level ★ Low ★★ Moderate ★★★ High

Metal type

S Steel	AL Aluminum	Ti Titanium
SS Stainless Steel	CI Cast Iron	Mg Magnesium Alloys
Ni Nickel Alloys	CB Copper/Brass	EC All Electrically Conductive

Welding processes

MIG (GMAW) ★

S SS Ni AL CB

- Easiest process to learn
- High welding speeds possible
- Provides better control on thinner metals
- Cleaner welds possible with no slag
- Same equipment can be used for flux-cored welding

Pulsed MIG (GMAW-P) ★

S SS Ni AL CB

- Flexibility and productivity — nearly all metals can be welded in all positions
- Larger diameter electrode wires for higher deposition rates
- Virtually no spatter
- Welds thin to thick metals

Flux-cored (FCAW) ★

S SS

- Can work as well as stick on dirty or rusty material
- Out-of-position welding
- Deep penetration for welding thick sections
- Increased metal deposition rate

Stick (SMAW) ★★

S SS Ni CI

- Well suited for windy, outdoor conditions
- More forgiving when welding on dirty or rusty metal

TIG (GTAW) ★★★

AC AL Mg DC S SS Ni CB Ti

- Provides highest quality and most precise welds
- Highly aesthetic weld beads
- Allows adjustment of heat input while welding by use of a remote control

Pulsed TIG (GTAW-P) ★★★

AC AL Mg DC S SS Ni CB Ti

- More control on thin metals
- Less heat distortion on thin metals

Resistance Spot ★

S SS Ni

- Simple, easy-to-operate welder for light industrial applications

---

Submerged Arc (SAW) ★★

S SS

- High deposition rates can enhance weld speed and production
- Excellent mechanical properties for high-quality code and X-ray requirements
- Improves welding operator comfort and appeal

Cutting processes

Plasma Arc Cutting and Gouging (PAC) ★

S SS Ni AL CI CB Ti Mg EC

- Use with any electrically conductive metals
- Small and precise cut
- Small heat-affected zone which helps prevent warping or paint damage

---

Oxy-fuel Cutting ★

S

- Cuts ferrous (containing iron) steels
- Requires no electricity
- Highly portable

Note: Oxy-fuel equipment can also be used for welding, heating, brazing and soldering

---

Air Carbon Arc Cutting and Gouging (CAC-A) ★★

AC CB DC S SS AL CI

- Wide variety of metals
- Removes discontinuities or inferior welds

2 Evaluate your needs: input power, output power, generator power and portability.

Input power

Does your machine need to be self-powered, or will AC power be available at the location where it's primarily used?

- For locations where an electrical hookup is not practical, consider a gas- or diesel-powered engine-driven welder/generator to supply welding and generator power.
- For locations where AC power is available, you need to know its type — and whether it's a match for the machine you're considering:

  Single-phase power is found in most homes and garages. Check to see if the machine you're considering requires single-phase power, and whether its voltage requirements (120 or 240 volts) are met by the electrical service at the intended location.

  Three-phase power is common in industrial settings. Check to see if the machine you're considering requires three-phase power and whether its voltage requirements are met by the electrical service at the intended location.

Output power

● **Light industrial** products are suitable for the home hobbyist or occasional user. They are designed to be easy to operate, are affordably priced and typically have a 20 percent duty cycle and rated output of 230 amps or lower.

● **Industrial** products are suitable for applications that do not require high-volume production. They typically have a 40 to 60 percent duty cycle and/or rated output of 300 amps or lower. Industrial products are an appropriate choice for professional welders.

● **Heavy industrial** products are suited to high-volume production and/or welding of thicker materials. They typically have a duty cycle of 60 to 100 percent and a rated output of at least 300 amps. Heavy industrial products are designed with the arc characteristics and product features professional welders demand for code-quality work.

Note: Units listed in more than one classification share attributes of both.

About duty cycles

Duty cycle is an indication of how long a power source can continuously weld (at a specific amperage and voltage) in a 10-minute period of time before it needs to cool down. For example, a machine with a 60 percent duty cycle at 300 amps and 32 volts of welding output can be used (at 300 amps and 32 volts) for 6 minutes out of a 10-minute period. When comparing two similar-sized power supplies it is important to pay close attention to both the amperage and voltage values that determine the rated load.

Power icons

- 1 Phase — Unit requires single-phase input power
- 3 Phase — Unit requires three-phase input power
- AC — Unit supplies alternating current weld output
- DC — Unit supplies direct current weld output
- AC/DC — Unit supplies alternating current and direct current weld output
- CC — Unit supplies constant-current weld output
- CV — Unit supplies constant-voltage weld output
- CC/CV — Unit supplies constant-current and constant-voltage weld output

Generator power

Out in the field, you may need an engine-driven welder/generator to supply 120- or 240-volt AC power to run tools and lights, or supply 12-volt DC power to charge automotive batteries and jump-start vehicles. Miller® welder/generators are packed with power; larger units even offer option packages that add 10 to 20 kW of generator power.

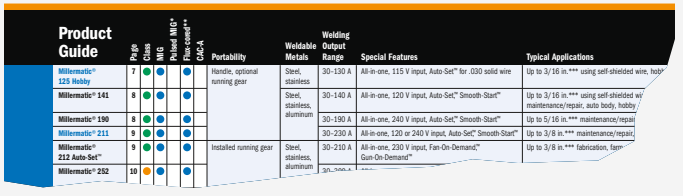
Portability

Can you bring the work to the machine, or does the machine need to go to the work? Check the Product Guide pages for types of portability:

- Shoulder strap, handles, running gear, carts, etc.
- Many engine-driven welding generators fit in the back of a pickup truck, enabling them to be driven to wherever the welding is needed. Heavy-duty trailers are also available for engine drives.

3 Check out the Product Guides.

The Product Guides (at the start of each major section) briefly describe and compare power sources within that section.



Product Guide	Pipe	Class	MIG	Pulsed MIG*	Flux-cored**	CAC-A	Portability	Weldable Metals	Welding Output Range	Special Features	Typical Applications
Millermatic® 125 Hobby	7	●	●		●		Handle, optional running gear	Steel, stainless	30-130 A	All-in-one, 115 V input, Auto-Set™ for .030 solid wire	Up to 3/16 in.*** using self-shielded wire, hobb
Millermatic® 141	8	●	●		●			Steel, stainless, aluminum	30-140 A	All-in-one, 120 V input, Auto-Set,™ Smooth-Start™	Up to 3/16 in.*** using self-shielded wi maintenance/repair, auto body, hobby
Millermatic® 190	8	●	●		●				30-190 A	All-in-one, 240 V input, Auto-Set,™ Smooth-Start™	Up to 5/16 in.*** maintenance/repair
Millermatic® 211	9	●	●		●				30-230 A	All-in-one, 120 or 240 V input, Auto-Set™ Smooth-Start™	Up to 3/8 in.*** maintenance/repair
Millermatic® 212 Auto-Set™	9	●	●		●		Installed running gear	Steel, stainless, aluminum	30-210 A	All-in-one, 230 V input, Fan-On-Demand™ Gun-On-Demand™	Up to 3/8 in.*** fabrication, farm
Millermatic® 252	10	●	●		●				30-300 A		

4 Go to product descriptions.
(Specifications are subject to change without notice.)

Colored bullets indicate output power classification. Power icons indicate power supplied or required (see descriptions above). Listing of recommended processes.

Color-coded sections are identified by a primary process icon and title.

For more product specifications, give the product name and literature number to your distributor, visit us on the Web at MillerWelds.com or call 1-800-4-A-MILLER.

MIG | POWER SOURCES/PACKAGES GMAW

Millermatic® 252

See literature no. DC/12.49

Industrial ● CV DC 1 Phase

Welding Capability

Max. 1/2 in. (13 mm) Mild Steel Min. 22 ga. (0.9 mm)

Max. 3/8 in. (9.5 mm) Aluminum Min. 14 ga. (1.9 mm)

Aluminum welding uses optional Spoolmatic 15A or 30A spool gun.

Infinite voltage control with self-calibrating digital meters that permit presetting of voltage and wire feed speed. Ensures precise parameters and accuracy.

EXCLUSIVE! Auto-Gun Detect™ automatically adjusts voltage, wire speed and timers for faster switching between MIG, push-pull and spool guns.

Integrated digital timers come complete with presettable preflow/postflow, burnback, spot and delay (stitch) times. Independent timers for MIG and spool gun.

Heavy-duty aluminum, two-drive-roll system.

Fan-On-Demand™ cooling system only operates when needed reducing power consumption and keeping internal components cleaner.

Superior aluminum MIG welding with direct connection of optional XR® push-pull guns, Spoolmatic/Spoolmatic Pro and Spoolmatic® 200 spool guns. No extra module to buy or install.

Recommended aluminum solution Spoolmatic 15A (#135 156) or 30A (#130 831).

*With Spoolmatic 30A, regulator, gas hose and dual cylinder rack.

Processes
• MIG (GMAW) • Flux-cored (FCAW)

Comes complete with
• 15 ft. (4.5 m), 250-amp M-25 gun
• 10 ft. (3 m) work cable with clamp
• 10 ft. (3 m) industrial power cord (and plug on 200/230 V model)
• Factory-installed gas solenoid
• Flow gauge regulator and gas hose for argon or Ar/CO_2 mix
• Factory-installed lowered running gear/cylinder rack
• .030/.035 in. reversible dual-groove drive rolls
• Extra contact tips

Most popular accessories
• Spoolmatic® 200 and Spoolmatic® Spool Guns (pg 18/19)
• XR® Air-Cooled Push-Pull Guns (pg 20)
• Dual EZ-Change® Low Cylinder Rack #300 337 (pg 106)
• Elevated Gun and Cable Rack #300 335 (pg 106)
• Protective Cover #195 142 (pg 109)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model/Stock Number	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V 230 V 460 V 575 V KVA KW	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
(#907 321) 200/208/230 V (#951 900*) 200/208/230 V (#907 322) 230/460/575 V (#951 985*) 230/460/575 V	30-300	200 A at 28 VDC, 60% duty cycle 250 A at 28 VDC, 40% duty cycle	48 42 – – 9.5 7.5 (at 60% duty cycle) – – 46 23 18 9.5 7.5 (at 60% duty cycle)	50-700 ipm (1.3-17.8 m/min.)	Solid steel .023-.045 in. (0.6-1.2 mm) Stainless .023-.045 in. (0.6-1.2 mm) Flux-cored .030-.045 in. (0.8-1.2 mm)	H: 30 in. (762 mm) W: 19 in. (482 mm) D: 40 in. (1,016 mm)	205 lb. (94 kg)

Brief listing of most popular accessories. Refer to pages listed for more details.

MIG | GMAW

Also see Multiprocess section for machines that can MIG weld.

For more detailed information, visit **MillerWelds.com/mig**

Product Guide

	Product Guide	Page	Class	MIG	Pulsed MIG*	Flux-cored**	CAC-A	Portability	Weldable Metals	Welding Output Range	Special Features	Typical Applications
Power Sources	Millermatic® 125 Hobby	7	●	●		●		Handle, optional running gear	Steel, stainless	30–130 A	All-in-one, 115 V input, Auto-Set™ for .030 solid wire	Up to 3/16 in.*** using self-shielded wire, hobby
	Millermatic® 141	8	●	●		●			Steel, stainless, aluminum	30–140 A	All-in-one, 120 V input, Auto-Set,™ Smooth-Start™	Up to 3/16 in.*** using self-shielded wire maintenance/repair, auto body, hobby
	Millermatic® 190	8	●	●		●				30–190 A	All-in-one, 240 V input, Auto-Set,™ Smooth-Start™	Up to 5/16 in.*** maintenance/repair, auto body, hobby
	Millermatic® 211	9	●	●		●				30–230 A	All-in-one, 120 or 240 V input, Auto-Set,™ Smooth-Start™	Up to 3/8 in.*** maintenance/repair, auto body, hobby
	Millermatic® 212 Auto-Set™	9	●	●		●		Installed running gear	Steel, stainless, aluminum	30–210 A	All-in-one, 230 V input, Fan-On-Demand,™ Gun-On-Demand™	Up to 3/8 in.*** fabrication, farm, garage/body shops
	Millermatic® 252	10	●	●		●				30–300 A	All-in-one, standard timers menu, Fan-On-Demand,™ can connect MIG gun, push-pull gun or spool gun	Up to 1/2 in.*** industrial production/fabrication, farm
	Millermatic® 350P	10	●	●	●	●				25–400 A	All-in-one, can connect standard MIG gun, push-pull gun or spool gun – auto body aluminum repair system available (see page 15)	Up to 1/2 in.*** industrial production/fabrication, pulsed MIG ideal for thin gauge aluminum
	CP-302	12	●	●		●		Lift eye, optional running gear, MIGRunner™	Most metals	14–44 V	Hi/lo stabilizer, power efficient	Equip/auto mfg, metal fab, construction, agri equipment
	Deltaweld® 302	12	●	●		●				10–32 V	Power efficient, material-specific output terminals	Equip/auto mfg, metal fab, construction, agri equipment
	Deltaweld® 452	12	●	●		●	1/4"			10–38 V	Power efficient, material-specific output terminals	Equip/auto mfg, metal fab, construction, agri equipment
	Deltaweld® 652	12	●	●		●	3/8"			10–44 V	Power efficient, material-specific output terminals	Equip/auto mfg, metal fab, construction, agri equipment
	Invision™ 352 MPa Plus System	13	●	●	●	●	1/4"	Handles, optional cart, MIGRunner™	Most metals	5–425 A 10–38 V	Alumination™ allows push/pull gun, optimized with 74 MPa Plus wire feeder	Manufacturing and production
	Invision™ 450 MPa Plus System	13	●	●	●	●	5/16"			15–600 A 10–38 V	Alumination™ allows push/pull gun, optimized with 74 MPa Plus wire feeder	Manufacturing and production
	Millermatic® 350P Aluminum	16	●	●	●			Installed running gear	Aluminum	25–400 A	All-in-one, optimized for feeding aluminum wire only using a push-pull gun or spool gun	Up to 1/2 in.*** industrial aluminum production/fab, pulsed MIG ideal for thin gauge aluminum
	AlumaFeed™ 350 Aluminum System	17	●	●	●			Handles, optional cart, MIGRunner™	Aluminum	5–425 A 10–38 V	Profile Pulse,™ lightweight feeder can be up to 100 feet from power source	Heavy industrial aluminum production/fabrication, truck trailer, shipbuilding
	AlumaFeed™ 450 Aluminum System	17	●	●	●					15–600 A 10–38 V	Profile Pulse,™ lightweight feeder can be up to 100 feet from power source	Heavy industrial aluminum production/fabrication, truck trailer, shipbuilding
Guns and Controls	Spoolmate™ Spool Guns	18	●	●				12 ft. (100) or 20 ft. (150/200/3035) cable	Steel, stainless, aluminum	–	.023–.035 in. (0.6–0.9 mm) wire capacity, economical, 135 A (100), 150 A (150/3035), 160 A (200)	Light industrial aluminum fabrication
	Spoolmatic® Spool Guns	19	●	●	◉	◉		15 or 30 ft. cable			.030–1/16 in. (0.8–1.6 mm) wire capacity; easy-to-rotate, self-seating head tube on Pro model	Industrial aluminum fabrication
	XR™-Pistol Push-Pull Guns	20	●	●	●			15 or 30 ft. (Pistol) or 15, 25 or 35 ft. (Pistol-Pro) cable	Aluminum	–	.030–1/16 in. (0.8–1.6 mm) wire capacity, air- and water-cooled models; easy-to-rotate, self-seating head tube on Pro model	Heavy industrial aluminum fabrication
	XR-Aluma-Pro™ Lite Push-Pull Gun	20	●	●	◉			25 ft. cable			.030–3/64 in. (0.8–1.2 mm) wire capacity, lightweight, air-cooled	Industrial aluminum fabrication
	XR-Aluma-Pro™ Push-Pull Guns	20	●	●	●			15, 25 or 35 ft. cable			.030–1/16 in. (0.8–1.6 mm) wire capacity, high-amperage, air- and water-cooled models	Heavy industrial aluminum fabrication
	XR™-Controls	21	●	●	◉			Handles, optional cart			.030–1/16 in. (0.8–1.6 mm) wire capacity, push-pull	Heavy industrial aluminum fabrication

Product Key

Class: ● Light Industrial ● Industrial ● Heavy Industrial **Capability:** ● Designed for this process ◉ Capable of this process

New! or Improved! products appear in blue type. *Guns and controls require pulse capable power source. **If using self-shielded wire on a CC/CV machine, use CV weld output. ***In a single pass.

See MIG packages chart (page 11) and aluminum solutions chart (page 14) for additional infomation.

Millermatic® 125 Hobby

See literature no. DC/12.3

Welding Capability

Max. 3/16 in. (4.8 mm)
Mild Steel
Min. 24 ga. (0.6 mm)

Auto-Set™ for .030-inch solid wire selects the correct parameters for the material you are welding.

- Turn the wire speed knob to Auto-Set
- Dial in the thickness of material you are welding
- Start welding!

Manual mode allows you to set your own parameters.

Tapped voltage control allows you to easily adjust the voltage when changing material thicknesses.

Cast-aluminum drive system with calibrated tension knob creates consistent feeding and easy setup.

Factory-installed gas solenoid makes it easy to change from MIG welding to flux-cored wire welding.

Quick Select™ drive roll makes setup quicker by offering three grooves – two for different size solid wire and a third for flux-cored wire.

Thermal overload protection shuts down unit and activates the **over temperature light** if airflow is blocked or duty cycle is exceeded. Automatically resets when unit cools.

Uses 4- or 8-inch (102 or 203 mm) spools.

Light industrial ● CV DC 1 Phase

Processes

- MIG (GMAW) • Flux-cored (FCAW)

Comes complete with

- 8 ft. (2.4 m) M-80 MIG gun and cable assembly
- 8 ft. (2.4 m) work cable with clamp
- Power cord with plug
- Quick Select™ drive roll for .024 in. (0.6 mm) or .030/.035 in. (0.8/0.9 mm) solid wire, and .030/.035 in. (0.8/0.9 mm) flux-cored wire
- Fixed flow regulator and gas hose, two .030 in. contact tips, Hobart® spool of .030 in. solid wire and material thickness gauge (#229 895)

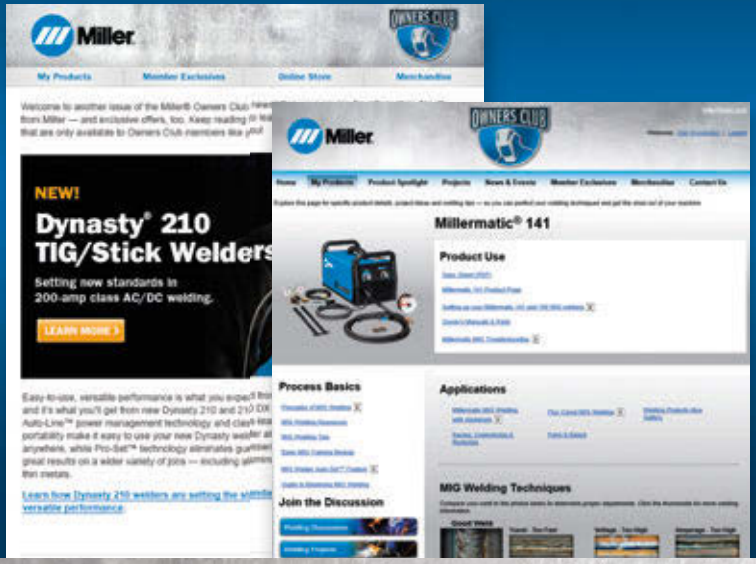
Most popular accessories

- Running Gear/Cylinder Rack #301 239 (pg 106)
- Protective Cover #301 333 (pg 109)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 115 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Machine Only Dimensions	Machine Only Net Weight
(#907 692) **(#951 678)** with running gear/cylinder rack	115 V	30–130	85 A at 18.25 VDC, 20% duty cycle	20	2.79	2.65	0–415 ipm (0–11 m/min.)	**Solid steel** .023–.030 in. (0.6–0.8 mm) **Stainless** .023 in. (0.6 mm) **Flux-cored** .030–.035 in. (0.8–0.9 mm)	H: 16.875 in. (429 mm) W: 9.875 in. (251 mm) D: 12.125 in. (308 mm)	49.7 lb. (22.5 kg)

The Miller® Owners Club



Created for welders who are passionate about what they do, the Miller Owners Club provides a personalized experience at **Owners.MillerWelds.com.** Since membership is limited to Miller equipment owners, members have exclusive access to product previews, welding tips and project ideas that support a welder's ability to do great work.

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Millermatic® 141 and 190

See literature no. DC/12.42 (141) and DC/12.44 (190)

Millermatic 190

Millermatic 141

Light industrial ● CV DC 1 Phase

Processes

▪ MIG (GMAW) ▪ Flux-cored (FCAW)

Comes complete with

- 10 ft. (3 m) M-100 MIG gun and cable assembly (#248 282)
- 10 ft. (3 m) work cable with clamp
- 6.5 ft. (2 m) power cord with plug
- Quick Select™ drive roll for .024 in. (0.6 mm) or .030/.035 in. (0.8/0.9 mm) solid wire, and .030/.035 in. (0.8/0.9 mm) flux-cored wire

- Flow gauge regulator and gas hose for argon or AR/CO_2 mix, two .030 in. contact tips, Hobart® spool of .030 in. solid wire, hook-and-loop cord wraps and material thickness gauge (#229 895)

Most popular accessories

- Spoolmate™ 100 #300 371 (pg 18)

- **Running Gear/Cylinder Rack** #301 239 (pg 106)
- Protective Cover #301 262 (pg 109)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Mild Steel Welding Capability

	141	190
Max.	3/16 in. (4.8 mm)	5/16 in. (7.9 mm)
Model	141	190
Min.	24 ga. (0.6 mm)	24 ga. (0.6 mm)

Aluminum Welding Capability

	141	190
Max.	14 ga. (1.9 mm)	1/4 in. (6.4 mm)
Model	141	190
Min.	18 ga. (1.2 mm)	18 ga. (1.2 mm)

Aluminum welding uses optional Spoolmate 100 spool gun and 4043 series aluminum wire.

Recommended aluminum solution

Spoolmate 100 (#300 371).

Auto-Set™ automatically provides the right settings to weld mild steel while **infinite voltage control** allows the flexibility to manually set your own parameters.

- Set the wire diameter (.024- or .030-inch diameter solid steel wire), a blue light shows Auto-Set is activated
- Dial in the thickness of material you are welding
- Start welding with the exact parameters you need!

Angled cast-aluminum drive system with calibrated tension knob creates consistent feeding and easy setup with included 10-foot (3 m) MIG gun or optional 15-foot (4.6 m) M-150 MIG gun (pg 11).

Quick Select™ **drive roll** makes setup quicker by offering three grooves – two for different size solid wire and a third for flux-cored wire.

Auto Spool Gun Detect™ automatically detects when a MIG gun or spool gun is connected eliminating the need for a switch.

Smooth-Start™ provides a smooth, spatter-free start.

Thermal overload protection shuts down unit and activates the **over temperature light** if airflow is blocked or duty cycle is exceeded. Automatically resets when unit cools.

Uses 4- or 8-inch (102 or 203 mm) spools.

Millermatic 190 model additional features

Inverter technology combines best-in-class arc characteristics with the portability of a 35-pound machine. The arc is extremely forgiving to variations in arc length and travel speeds.

Fan-On-Demand™ power source cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled though the machine.

Model/Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 120 V	240 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Machine Only Dimensions	Machine Only Net Weight
Millermatic 141 (#907 612) (#951 601) with running gear/cylinder rack	120 V	30–140	90 A at 18.5 VDC, 20% duty cycle	20	–	3.0	2.45	15–360 ipm (0.4–9.1 m/min.)	**Solid steel** .023–.030 in. (0.6–0.8 mm) **Stainless** .023–.030 in. (0.6–0.8 mm) **Flux-cored** .030–.035 in. (0.8–0.9 mm)	H: 12.5 in. (318 mm) W: 11.25 in. (286 mm) D: 20.5 in. (521 mm)	51 lb. (23.1 kg)
Millermatic 190 (#907 613) (#951 602) with running gear/cylinder rack	240 V	30–190	140 A at 21 VDC, 40% duty cycle	–	21	5.0	3.8	60–600 ipm (1.5–15.2 m/min.)	**Solid steel** .023–.035 in. (0.6–0.9 mm) **Stainless** .023–.035 in. (0.6–0.9 mm) **Flux-cored** .030–.035 in. (0.8–0.9 mm)		35 lb. (15.9 kg)

Millermatic® 211

See literature no. DC/12.58

Multi-voltage plug (MVP™) allows connection to common 120- and 240-volt power receptacles without the use of any tools – simply choose the plug that fits the receptacle and connect to the power cord.

Recommended aluminum solutions

Spoolmate 100 (#300 371) or 150 (#301 272).

Welding Capability

Max. 3/8 in. (9.5 mm)	Max. 3/8 in. (9.5 mm)
Mild Steel	Aluminum
Min. 24 ga. (0.6 mm)	Min. 18 ga. (1.2 mm)

Aluminum welding uses optional Spoolmate 100 or Spoolmate 150 spool guns.

Advanced Auto-Set™ now includes five different wire/gas combinations and .024-, .030- and .035-inch wires. The easiest welder to use just became more versatile. Manual mode allows you to set your own parameters while welding.

Inverter technology combines best-in-class arc characteristics with the portability of a 38-pound machine. The arc is extremely forgiving to variations in arc length and travel speeds.

Angled cast-aluminum drive system with calibrated tension knob for consistent feeding and easy setup for up to 15-foot (4.6 m) MIG guns.

Quick Select™ **drive roll** makes setup quicker by offering three grooves – two for different size solid wire and a third for flux-cored wire.

Auto Spool Gun Detect™ automatically detects when a MIG gun or spool gun is connected eliminating the need for a switch.

Fan-On-Demand™ and **thermal overload protection** protect your investment (see page 8 for more information).

Smooth-Start™ provides a smooth, spatter-free start. It's the best-starting machine in the small MIG machine category.

Uses 4- or 8-inch (102 or 203 mm) spools.

Light Industrial ● CV DC 1 Phase

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)

Comes complete with

- 10 ft. (3 m) M-100 MIG gun and cable assembly (#248 282)
- 10 ft. (3 m) work cable with clamp
- 6.5 ft. (2 m) power cord with MVP plugs for 120 V and 240 V
- Quick Select™ drive roll for .024 in. (0.6 mm) or .030/.035 in. (0.8/0.9 mm) solid wire, and .030/.035 in. (0.8/0.9 mm) flux-cored wire
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix, two .030 in. contact tips, Hobart® spool of .030 in. solid wire, hook-and-loop cord wraps and material thickness gauge (#229 895)

Most popular accessories

- Spoolmate™ 100 #300 371 (pg 18)
- Spoolmate™ 150 #301 272 (pg 18)
- Running Gear/Cylinder Rack #301 239 (pg 106)
- Protective Cover #301 262 (pg 109)
- V-Knurled Drive Roll #202 926

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 120 V	240 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Machine Only Dimensions	Machine Only Net Weight
(#907 614) **(#951 603)** with running gear/cylinder rack	120 V	30–130	115 A at 19.8 VDC, 20% duty cycle	24.3	–	2.9	2.9	60–600 ipm (1.5–15.2 m/min.)	**Solid steel** .023–.035 in. (0.6–0.9 mm) **Stainless** .023–.035 in. (0.6–0.9 mm) **Flux-cored** .030–.045 in. (0.8–1.2 mm)	H: 12.5 in. (318 mm) W: 11.25 in. (286 mm) D: 20.5 in. (521 mm)	38 lb. (17.2 kg)
	240 V	30–230	150 A at 21.5 VDC, 40% duty cycle	–	16.6	4.0	4.0				

Millermatic® 212 Auto-Set™

See literature no. DC/12.46

Recommended aluminum solution

Spoolmate 200 (#300 497).

Welding Capability

Max. 3/8 in. (9.5 mm)	Max. 3/8 in. (9.5 mm)
Mild Steel	Aluminum
Min. 22 ga. (0.8 mm)	Min. 14 ga. (1.9 mm)

Aluminum welding uses optional Spoolmate 200 spool gun.

Auto-Set™ makes setup quick and easy. On the Millermatic 212, it works with .030- and .035-inch wire (see page 8 for more information).

Infinite voltage control. When used in manual mode provides broader operating range with finer control than a tap machine.

Gun-On-Demand.™ Simply pull the trigger for either gun and you're ready to weld. No wasted time installing modules and using gas valve kits.

Heavy-duty aluminum, two-drive-roll system.

Fan-On-Demand™ cooling system only operates when needed reducing power consumption and keeping internal components cleaner.

Aluminum MIG welding with optional Spoolmate™ 200 spool gun. Wire feed speed control on the gun saves time by reducing trips back to the machine. Also compatible with the more industrial Spoolmatic® spool guns.

Light Industrial ● CV DC 1 Phase

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)

Comes complete with

- 15 ft. (4.5 m), 250-amp M-25 gun
- 10 ft. (3 m) work cable with clamp
- 7 ft. (2.1 m) power cord and plug
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix
- Factory-installed lowered running gear/cylinder rack
- .030/.035 in. reversible dual-groove drive rolls
- Extra contact tips and material thickness gauge (#229 895)

Most popular accessories

- Spoolmate™ 200 #300 497 (pg 18)
- Dual EZ-Change™ Low Cylinder Rack #300 337 (pg 106)
- Elevated Gun and Cable Rack #300 335 (pg 106)
- Protective Cover #195 142 (pg 109)
- Full KVA Adapter Cord #300 517

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
(#907 405) 200(208)/230 V **(#951 177)** 200(208)/230 V with Spoolmate 200, regulator, gas hose and dual cylinder rack	30–210	160 A at 24.5 VDC, 60% duty cycle	31	28	6.2	5.2	50–700 ipm (1.3–17.8 m/min.)	**Solid steel** .023–.035 in. (0.6–0.9 mm) **Stainless** .023–.035 in. (0.6–0.9 mm) **Flux-cored** .030–.045 in. (0.8–1.2 mm)	H: 30 in. (762 mm) W: 19 in. (483 mm) D: 40 in. (1,016 mm)	183 lb. (83 kg)

Millermatic® 252

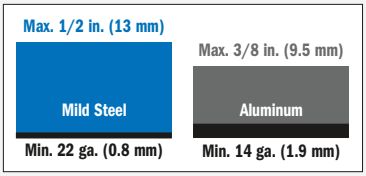
See literature no. DC/12.49

Recommended aluminum solution

Spoolmatic 15A (#195 156) or 30A (#130 831).

**With Spoolmatic 30A, regulator, gas hose and dual cylinder rack.*

Welding Capability



Aluminum welding uses optional Spoolmatic 15A or 30A spool gun.

Infinite voltage control with self-calibrating digital meters that permit presetting of voltage and wire feed speed. Ensures precise parameters and accuracy.

***EXCLUSIVE!* Auto-Gun Detect™** automatically adjusts voltage, wire speed and timers for faster switching between MIG, push-pull and spool guns.

Integrated digital timers come complete with presettable preflow/postflow, burnback, spot and delay (stitch) timers. Independent timers for MIG and spool gun.

Heavy-duty aluminum, two-drive-roll system.

Fan-On-Demand™ cooling system only operates when needed reducing power consumption and keeping internal components cleaner.

Superior aluminum MIG welding with direct connection of optional Spoolmate™ 200 and Spoolmatic®/Spoolmatic Pro spool guns or XR™ push-pull guns. No extra module to buy or install.

Industrial ● CV DC 1 Phase

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)

Comes complete with
- 15 ft. (4.5 m), 250-amp M-25 gun
- 10 ft. (3 m) work cable with clamp
- 10 ft. (3 m) industrial power cord (and plug on 200/230 V model)
- Factory-installed gas solenoid
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix
- Factory-installed lowered running gear/cylinder rack
- .030/.035 in. reversible dual-groove drive rolls
- Extra contact tips

Most popular accessories
- Spoolmate™ 200 and Spoolmatic® Spool Guns (pg 18/19)
- XR™ Air-Cooled Push-Pull Guns (pg 20)
- Dual EZ-Change™ Low Cylinder Rack #300 337 (pg 106)
- Elevated Gun and Cable Rack #300 335 (pg 106)
- Protective Cover #195 142 (pg 109)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model/Stock Number	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	460 V	575 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
(#907 321) 200(208)/230 V **(#951 066*)** 200(208)/230 V	30–300	200 A at 28 VDC, 60% duty cycle	48	42	–	–	9.5	7.5	50–700 ipm (1.3–17.8 m/min.)	**Solid steel** .023–.045 in. (0.6–1.2 mm) **Stainless** .023–.045 in. (0.6–1.2 mm) **Flux-cored** .030–.045 in. (0.8–1.2 mm)	H: 30 in. (762 mm) W: 19 in. (483 mm) D: 40 in. (1,016 mm)	205 lb. (94 kg)
			(at 60% duty cycle)									
(#907 322) 230/460/575 V **(#951 065*)** 230/460/575 V		250 A at 28 VDC, 40% duty cycle	–	46	23	18	9.5	7.5				
			(at 60% duty cycle)									

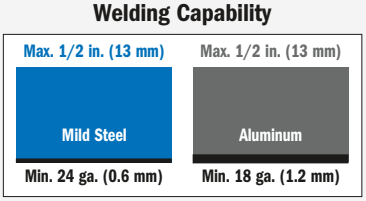
Millermatic® 350P

See literature no. DC/12.51

Recommended aluminum solution

XR-Aluma-Pro push-pull gun (see page 20).

Welding Capability



Aluminum welding uses optional Aluma-Pro push-pull gun.

Built-in pulsed MIG programs. All programmed information is restored after each power up — aluminum/steel/stainless steel/metal-cored.

Infinite voltage control with self-calibrating digital meters that permit presetting of voltage and wire feed speed. Ensures precise parameters and accuracy.

***EXCLUSIVE!* Auto-Gun Detect™** automatically adjusts voltage, wire speed and timers for faster switching between MIG, push-pull and spool guns.

Integrated digital timers come complete with presettable preflow/postflow and spot timers. Independent timers for MIG and push-pull guns.

Heavy-duty aluminum, four-drive-roll system.

Fan-On-Demand™ cooling system only operates when needed reducing power consumption and keeping internal components cleaner.

Industrial ● CV DC 3 Phase 1 Phase

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)
- Pulsed MIG (GMAW-P)

Comes complete with
- 15 ft. (4.5 m) Bernard™ BTB Gun 300 A with Centerfire™ consumables
- 10 ft. (3 m) work cable with clamp
- 10 ft. (3 m) industrial power cord (without plug) for single- or three-phase
- Factory-installed gas solenoid
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix
- Factory-installed, low-mounted running gear/cylinder rack
- .035/.045 in. reversible V-groove drive rolls (order U-groove drive rolls for aluminum welding)
- Extra contact tips

Most popular accessories
- Spoolmatic® Spool Guns (pg 19)
- XR™ Air-Cooled Push-Pull Guns (pg 20)
- Dual Cylinder Rack #195 299 (pg 106)
- Protective Cover #195 142 (pg 109)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	460 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
(#907 300) 200/230/460 V	Three-phase	25–400	300 A at 32 VDC, 60% duty cycle	34	30	15	11.6	11.5	**MIG gun** 50–700 ipm (1.3–17.8 m/min.) **Optional spool gun/push-pull gun** 50–800 ipm (1.3–20 m/min.)	**Solid steel** .023–.045 in. (0.6–1.2 mm) **Stainless** .030–.045 in. (0.8–1.2 mm) **Aluminum** .035–.047 in. (0.9–1.2 mm) **Metal-cored** .035–.052 in. (0.9–1.3 mm) **Flux-cored** .030–.052 in. (0.8–1.3 mm)	H: 34 in. (863 mm) W: 19 in. (483 mm) D: 41 in. (1,041 mm)	181 lb. (82 kg)
	Single-phase			69	61	30	13.1	11.2				

MIGmatic™ M-Series MIG Guns

See literature no. AY/15.0

An ideal match for Miller® all-in-one MIG machines or other Miller wire feeders.

Three-piece nozzle construction extends nozzle life by reducing wear and helps prevent rocking of nozzle on contact tip adapter.

Interchangeable contact tips and monocoil liners help reduce parts inventory.

Brass contact tip adapter helps prevent galling, sticking and stripping of threads.

Single-piece high-impact handle is almost indestructible with ergonomic design.

Steel spring strain relief protects power cable from wear and helps prevent liner from kinking, allowing better wire feedability.

360-degree rotatable gooseneck permits trigger activation with either the finger or thumb.

Light industrial ● *M-100/M-150*
Industrial ● *M-25*

Processes
- MIG (GMAW) • Flux-cored (FCAW)

Suggested power sources
- Millermatic® 141/190/211 (M-100/M-150) (pg 8/9)
- Millermatic® 212 Auto-Set™/252 (M-25) (pg 9/10)
- Multimatic 200 (M-150) (pg 31)

Most popular accessories
- MIGmatic M-Series Consumable Kits (pg 109)
  For M-100/M-150
  #234 607 .023 in. (0.6 mm)
  #234 608 .030 in. (0.8 mm)
  #234 609 .035 in. (0.9 mm)
  For M-25
  #234 610 .030 in. (0.8 mm)
  #234 611 .035 in. (0.9 mm)
  #234 612 .045 in. (1.2 mm)
- Aluminum Conversion Kit #172 136 (pg 109)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Stock Number	Cable Length	Rated Output	Rated Duty Cycle	Standard Wire Size	Max. Wire Size	Gun Only Net Weight
M-100	#248 282	10 ft. (3 m)	100 A	100% with CO_2 gas, 60% with mixed gas	.030–.035 in. (0.8–0.9 mm)	.045 in. (1.2 mm)	3.2 lb. (1.5 kg)
M-150	#249 039	10 ft. (3 m)	150 A	100% with CO_2 gas, 60% with mixed gas	.030–.035 in. (0.8–0.9 mm)	.045 in. (1.2 mm)	4.4 lb. (2.0 kg)
	#249 040	12 ft. (3.7 m)					4.7 lb. (2.1 kg)
	#249 041	15 ft. (4.6 m)					6.0 lb. (2.7 kg)
M-25	#169 594	10 ft. (3 m)	250 A	100% with CO_2 gas, 60% with mixed gas	.030–.035 in. (0.8–0.9 mm)	3/64 in. (1.2 mm)	5.4 lb. (2.5 kg)
	#169 596	12 ft. (3.7 m)					6.0 lb. (2.7 kg)
	#169 598	15 ft. (4.6 m)					7.2 lb. (3.3 kg)
	#169 599	15 ft. (4.6 m)			.035–.045 in. (0.9–1.2 mm)	3/64 in. (1.2 mm)	7.2 lb. (3.3 kg)

MIG Packages for Demanding Industrial Applications

Power Source Welding Performance		300 Amp					450 Amp				650 Amp	
		CP-302 with 22A (pg 12)	Deltaweld® 302 with S-74D (pg 12)	Invision™ 352 MPa w/S-74 MPa Plus (pg 13)	Axcess® 300 w/Feeder (pg 22)	Continuum™ 350 w/Feeder (pg 23)	Deltaweld® 452 with S-74D (pg 12)	Invision™ 450 MPa w/S-74 MPa Plus (pg 13)	Axcess® 450 w/Feeder (pg 22)	Continuum™ 500 w/Feeder (pg 23)	Deltaweld® 652 with S-74D (pg 12)	Axcess® 675 w/Feeder (pg 22)
Material	Mild Steel	●	●	●	●	●	●	●	●	●	●	●
	Stainless Steel	◉	◉	●	●	●	◉	●	●	●	◉	●
	Aluminum		◉	●	◉	◉	◉	●	◉	◉	◉	◉
Material Thickness	Gauge (.020–.125 in.)	●	●	●	◉	◉	◉	●	◉	◉	◉	◉
	Sheet (.125–.375 in.)	●	●	●	●	●	●	●	●	●	●	●
	Plate (.375–1 in.)	◉	◉	◉	◉	●	●	●	●	●	●	●
	Plate (1+ in.)					●	◉	◉	●	●	●	●
Wire Size	.030 in.	●	●	●			◉	●				
	.035 in.	●	●	●	●	●	●	●	●	●	●	●
	.045 and .052 in.	◉	●	●	●	●	●	●	●	●	●	●
	1/16 in.	◉	◉	●		●	●	●	●	●	●	●
	5/64 in.					●	●	●	●	●	●	●
	3/32 in.						◉	◉	◉	◉	●	●
Process All machines designed for MIG spray transfer and flux-cored.	Short Circuit	★★	★★	★★★★	★★★★	★★★★	★★	★★★★	★★★★	★★★★	★★	★★★★
	Pulsed Spray			★★★★	★★★★	★★★★		★★★★	★★★★	★★★★		★★★★
	Accu-Pulse®				★★★★	★★★★			★★★★	★★★★		★★★★
	RMD®				Optional ★★★★	★★★★			Optional ★★★★	★★★★		Optional ★★★★
	CAC-A			1/4 in.		1/4 in.	1/4 in.	5/16 in.	1/4 in.	5/16 in.	3/8 in.	3/8 in.

Icon Key Capability: ● Designed for ◉ Capable of Process Quality: ★ Good ★★ Better ★★★ Best ★★★★ Optimized

CP-302

See literature no. DC/13.0

Cost-effective, simple MIG power source designed for manufacturing.

CP-302 MIGRunner package (#951 230) shown.

*Build your own system at **MillerWelds.com/equiptoweld** or see packages below.*

Large analog meters are easy to read and display preset and actual voltage and amperage.

14-pin receptacle provides a quick, direct connection to Miller® wire feeders.

115-volt power for tools and coolant systems.

Deltaweld® Series

See literature no. DC/16.2

Industry standard for heavy-industrial MIG welding. Designed for manufacturing operations, with 100 percent duty cycle for extended arc-on time.

Deltaweld 452 MIGRunner package (#951 302) shown.

*Build your own system at **MillerWelds.com/equiptoweld** or see packages below.*

Line voltage compensation ensures consistent weld performance even when primary power varies.

Fan-On-Demand™ cooling system operates only when needed. Reduces contaminants drawn into the machine and excess noise in work areas.

Digital meters are easy to read and display preset and actual voltage and amperage.

14-pin receptacle provides a quick, direct connection to Miller® wire feeders. Capable of remote voltage control.

115-volt power for tools and coolant systems.

Thermal overload protection light indicates power shutdown. Helps prevent machine damage if the duty cycle is exceeded or airflow is blocked.

Industrial *302 models*
Heavy industrial *452/652 models*

CV DC 3 Phase

Processes

- MIG (GMAW) • Flux-cored (FCAW)
- Air carbon arc gouging (CAC-A) (Deltaweld 452: 1/4 in. carbons) (Deltaweld 652: 3/8 in. carbons)

Stationary package includes

- Power source
- 22A (CP-302) or S-74D (Deltaweld) feeder with .035/.045 in. drive rolls
- Bernard™ BTB Gun 300 A (CP-302) or BTB Gun 400 A (Deltaweld)
- Industrial MIG 4/0 kit consisting of flowmeter regulator with 10 ft. (3 m) gas hose, 10 ft. (3 m) 4/0 feeder weld cable with lugs, and 15 ft. (4.6 m) work cable with 600-amp C-clamp.

MIGRunner™ package includes above plus

- Factory-installed standard running gear and standard cylinder rack

Most popular accessories

- 20 Series Feeders (pg 44)
- 70 Series Feeders (pg 44)
- Bernard™ MIG Guns (pg 47)
- Standard Running Gear #042 886 (pg 106)
- Standard Cylinder Rack #042 887 (pg 106)
- Industrial MIG 4/0 Kit (with lug connectors) #300 390 (pg 109)
- Extension Cables (pg 114)
  #242 208 025 25 ft. (7.6 m)
  #242 208 050 50 ft. (15 m)
  #242 208 080 80 ft. (24.4 m)

When purchasing components separately, visit MillerWelds.com/equiptoweld or your distributor for other Miller® options and accessories.

Models/Packages

**Additional packages are available – visit MillerWelds.com or your distributor.*

Models	Power Source Only Stock Number	Stationary Package Stock Number*	MIGRunner Package Stock Number*
CP-302	**(#903 786)** 200/230/460 V	**(#951 231)**	**(#951 230)**
Deltaweld 302	**(#903 376)** 200(208)/230/460 V	**(#951 235)**	**(#951 234)**
	(#903 392) 230/460/575 V	–	**(#951 300)**
Deltaweld 452	**(#903 377)** 200(208)/230/460 V	**(#951 237)**	**(#951 236)**
	(#903 394) 230/460/575 V	**(#951 301)**	**(#951 302)**
Deltaweld 652	**(#903 396)** 230/460/575 V	**(#951 239)**	**(#951 238)**

Model	Voltage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	460 V	575 V	KVA	KW	Open-Circuit Voltage	Dimensions (Includes lift eye and strain relief)	Net Weight
CP-302	14–44	300 A at 32 VDC, 100% duty cycle	38	33	16.5	–	13.1	12.3	14–44 VDC	H: 30 in. (762 mm) W: 23 in. (585 mm) 302 D: 30.5 in. (775 mm) 452/652 D: 38 in. (966 mm)	332 lb. (151 kg)
Deltaweld 302	10–32	300 A at 32 VDC, 100% duty cycle	48	42	21	17	16.9	12.9	42 VDC max.		323 lb. (147 kg)
Deltaweld 452	10–38	450 A at 38 VDC, 100% duty cycle	72	63	32	25	25.1	21.1	48 VDC max.		384 lb. (174 kg)
Deltaweld 652	10–44	650 A at 44 VDC, 100% duty cycle	–	96	48	38	38.2	34.2	54 VDC max.		472 lb. (214 kg)

Invision™ MPa Plus System

See literature no. DC/23.6

MIG and synergic pulsed MIG system with optimized weld programs for both steel and aluminum.

Invision 352 MPa with S-74 MPa Plus feeder shown.

Build your own system at ***MillerWelds.com/equiptoweld*** *or see packages below.*

Recommended Aluminum Solution

Dedicated XR Plus guns work with MPa Plus feeders to coordinate wire feed speed of the gun and the feeder. This provides optimized aluminum feeding and welding performance. See page 45 for stock numbers.

Built-in MIG and pulsed MIG programs automatically set the optimal parameters for a wide variety of wires making it easy to set up and use.

Synergic pulsed MIG. As wire speed increases/decreases, pulse parameters also increase/decrease to match the right amount of power needed, eliminating the need to make additional adjustments.

Profile Pulse™ provides TIG appearance with MIG simplicity and productivity.

Achieve "stacked dimes" without gun manipulation. Profile Pulse frequency can be changed to increase or decrease the spacing between the ripple pattern to achieve the desired weld appearance.

Invision 352 model allows for any input voltage hookup (208–575 V, single- or three-phase) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power. *450 model is 230/460 V manual link or 575 V, three-phase only.*

Easy to set up. Select wire diameter, wire type and gas being used, set your wire speed and strike an arc.

Wind Tunnel Technology™ Air flow that protects internal components, greatly improving reliability.

Fan-On-Demand™ cooling system operates only when needed, reducing noise, energy use and amount of contaminants pulled through machine.

Heavy industrial

CC/CV DC 3 Phase 1 Phase *Invision 450 is 3-phase only.*

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)
- Pulsed MIG (GMAW-P)
- Air carbon arc gouging (CAC-A) (Invision 352: 1/4 in. carbons) (Invision 450: 5/16 in. carbons)

Optimized wire feeding options

- 70 Series MPa Plus feeders (pg 44)
- XR-Aluma-Pro™ Plus and XR™-Pistol Plus push-pull guns (pg 45)
- 70 Series Swingarc™ with MPa Plus control box (pg 46)
- Single- and dual-remote configurations (pg 46, for more information see literature no. DC/23.6)

Most popular accessories

- MIGRunner™ Cart (single feeders only) #195 445 (pg 107)
- Running Gear Cylinder Rack #300 408 (pg 107)
- Coolmate™ 3 #043 007 (pg 107)
- Industrial MIG 4/0 Kits (pg 109)
  - #300 405 With Dinse connectors (352 MPa only)
  - #300 390 With lug connectors (450 MPa only)
  - Consists of flowmeter regulator with 10 ft. (3 m) gas hose, 10 ft. (3 m) 4/0 feeder weld cable, and 15 ft. (4.6 m) work cable with 600-amp C-clamp.
- Extension Cables (pg 114)
  - #247 831 025 25 ft. (7.6 m)
  - #247 831 050 50 ft. (15 m)
  - #247 831 080 80 ft. (24.4 m)

When purchasing components separately, visit MillerWelds.com/equiptoweld or your distributor for other Miller® options and accessories.

Models/Packages

**Additional packages are available—visit MillerWelds.com or your distributor.*

Power Source Only Stock Number		Package Stock Number*	70 Series MPa Plus Feeder with Push-Only Bernard™ BTB Gun 400 A and .035/.045 in. Drive Rolls	XR-Aluma-Pro™ Plus Push-Pull MIG Gun	Industrial MIG 4/0 Kit	Cart
Invision 352 MPa (#907 431) 208–575 V **(#907 431 001)** 208–575 V with auxiliary power	Alum	**(#951 287)** w/352 model (#907 431)	S-74 (single-wire feeder with one gun)	25 ft. air-cooled	With Dinse connectors	MIGRunner cart
	Alum	**(#951 501)** w/352 model (#907 431)	D-74 (dual-wire feeder with two guns)	25 ft. air-cooled	With Dinse connectors	Running gear cylinder rack
	Steel	**(#951 411)** w/352 model (#907 431)	S-74 (single-wire feeder with one gun)	–	With Dinse connectors	MIGRunner cart
	Steel	**(#951 500)** w/352 model (#907 431)	D-74 (dual-wire feeder with two guns)	–	With Dinse connectors	Running gear cylinder rack
Invision 450 MPa (#907 485) 230/460 V with auxiliary power **(#907 486)** 575 V with auxiliary power	Steel	**(#951 499)** w/450 model (#907 485)	S-74 (single-wire feeder with one gun)	–	With lug connectors	MIGRunner cart
	Steel	**(#951 457)** w/450 model (#907 485)	D-74 (dual-wire feeder with two guns)	–	With lug connectors	Running gear cylinder rack

Note: See aluminum solutions comparison chart on page 14.

Model	Input Power	Amp/Volt Ranges	Rated Output	Amps Input at Rated Load Output, 60 Hz 208 V	230 V	400 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
Invision 352 MPa	Three-phase	5–425 A 10–38 V	350 A at 34 VDC, 60% duty cycle	40.4	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC	H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)	80 lb. (36.3 kg)
	Single-phase	5–425 A 10–38 V	300 A at 32 VDC, 60% duty cycle	60.8	54.6	29.7	24.5	19.9	11.7	11.2			
Invision 450 MPa	Three-phase	15–600 A 10–38 V	450 A at 36.5 VDC, 100% duty cycle	–	49.4	–	27.2	23.6	21.6 (23.5 on 575 V)	18.3	90 VDC	H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)	122 lb. (55.3 kg)

Choose the Right Industrial Aluminum MIG Solution

For additional aluminum MIG solutions, see spool guns, push-pull guns and controls on pages 18–21.

	Millermatic® 350P Aluminum Push-Pull Gun System (page 16)	AlumaFeed® Synergic Aluminum Welding System (page 17)	Invision™ MPa Plus System (page 13)
	Millermatic 350P Aluminum with XR-Aluma-Pro gun shown.	*AlumaPower 450 MPa and XR-AlumaFeed with XR-Aluma-Pro gun shown.*	*Invision 352 MPa and D-74 MPa plus feeder with XR-Aluma-Pro and Bernard BTB Gun 400 A guns shown.*
	Cost-effective industrial all-in-one MIG/pulsed MIG solution with easy-to-use interface for aluminum welding on material up to 1/2-inch thick. Features built-in running gear for mobility.	**Dedicated heavy-industrial-fabrication solution for aluminum welding, with advanced features that can handle larger weldments. Its lightweight push-pull feeder can easily be carried up to 100 feet from the power source.**	**Versatile, heavy-industrial advanced system for large, high-duty-cycle aluminum and steel weldments. Features push and/or push-pull bench feeder for easy switchover between solid, aluminum and tubular wires.**
Power Source	**Millermatic 350P Aluminum (all-in-one)**	**AlumaPower™ 350 MPa or 450 MPa**	**Invision 352 MPa or 450 MPa**
Feeder	**All-in-one** – built-in running gear with cylinder rack is easily maneuverable from area to area	**Single-wire XR-AlumaFeed** – portable feeder can be carried up to 100 feet from power source	**Single- or dual-wire 74 MPa Plus** – stationary feeders can be mounted up to 100 feet from power source
Input Voltage	**Single- or three-phase**	**Single- or three-phase** (450 MPa is three-phase only)	**Single- or three-phase** (450 MPa is three-phase only)
Rated Output	**300 A at 60% duty cycle**	**350 MPa: 350 A at 60% duty cycle** **450 MPa: 450 A at 100% duty cycle**	**352 MPa: 350 A at 60% duty cycle** **450 MPa: 450 A at 100% duty cycle**
Primary Connection	**Auto-Link®** – Automatically links the power source to primary voltage being applied. Auto-link is used to link to 208 or 230 V and manually moving a link board is required to link to 460 V.	**350 MPa: Auto-Line™** – Allows for any primary input voltage (208–575 V, single- or three-phase, 50 or 60 Hz) with no manual linking. Also adjusts for voltage spikes within the entire range. **450 MPa:** 230/460 V manual linking or 575 V	**352 MPa: Auto-Line™** – Allows for any primary input voltage (208–575 V, single- or three-phase, 50 or 60 Hz) with no manual linking. Also adjusts for voltage spikes within the entire range. **450 MPa:** 230/460 V manual linking or 575 V
Aluminum Wire Diameters	**.035–.047 in. (0.9–1.2 mm)**	**.035–1/16 in. (0.9–1.6 mm)**	**.035–1/16 in. (0.9–1.6 mm)**
Gun Capability	**XR-Aluma-Pro™, XR-Aluma-Pro™ Lite, or XR™-Pistol**	**XR-Aluma-Pro™, XR-Aluma-Pro™ Lite, or XR™-Pistol**	**XR-Aluma-Pro™ Plus, XR™-Pistol Plus or standard MIG gun**
MIG Modes			
Profile Pulse™	–	**Yes** – achieve a "stacked dime" appearance quickly and easily without gun manipulation	**Yes** – achieve a "stacked dime" appearance quickly and easily without gun manipulation
Synergic Pulsed MIG	**Yes** – "one-knob" control, only need to change wire feed speed to weld different material thicknesses	**Yes** – "one-knob" control, only need to change wire feed speed to weld different material thicknesses	**Yes** – "one-knob" control, only need to change wire feed speed to weld different material thicknesses
MIG	**Spray transfer MIG** – for aluminum wires	**Spray transfer MIG** – for aluminum wires	**Conventional MIG** – modes for aluminum, steel and other wires
Features			
Built-In Pulsed Programs	**Aluminum**	**Aluminum**	**Aluminum, steel, stainless and others**
Portability	**Built-in running gear with cylinder rack** – easily maneuverable from area to area	**Lightweight, portable feeder with handle** – can be carried up to 100 feet from power source	**Stationary feeder** – can be mounted up to 100 feet from power source
Trigger Hold	**Yes** – reduces operator fatigue from holding trigger	**Yes** – reduces operator fatigue from holding trigger	**Yes** – reduces operator fatigue from holding trigger
Trigger Schedule Select	**Yes** – allows operator to switch between two preset weld conditions by tapping the trigger	**Yes** – allows operator to switch between two preset weld conditions by tapping the trigger	**Yes** – allows operator to switch between two preset weld conditions by tapping the trigger
Program Locks	–	**Yes** – prevents unintended changes to the welding program weld parameters	**Yes** – prevents unintended changes to the welding program weld parameters
Flow Meter	–	**Yes** – allows flow to be set at feeder even when gas supply is a long distance away	–

Millermatic® 350P

Auto Body Aluminum Repair System

See literature no. DC/12.51

The ideal auto body welding package for aluminum and steel repair.

Welding Capability

Max. 1/2 in. (13 mm)	Max. 1/2 in. (13 mm)
Mild Steel	Aluminum
Min. 24 ga. (0.6 mm)	Min. 22 ga. (0.8 mm)

Aluminum welding uses Bernard BTB Gun 200 A aluminum MIG gun.

Complies with 2015 Ford F-150 body shop welding machine certification for aluminum body vehicles.

Optimized low-end aluminum pulse program. Reduces heat input to prevent warping and burn-through on thin 18-gauge aluminum auto body panels

Customized Bernard™ aluminum MIG gun. 12-foot (3.7 m) Bernard BTB Gun 200 A with Teflon liner and 30-degree head tube for superior aluminum wire delivery.

Hobart® 5554 aluminum wire specified by Ford. Includes one eight-inch, five-pound spool of .047-inch aluminum wire.

See page 10 for Millermatic 350P power source features.

Industrial ● CV DC 3 Phase 1 Phase

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)
- Pulsed MIG (GMAW-P)

Comes complete with

- 12 ft. (3.7 m) Bernard™ BTB Gun 200 A aluminum MIG gun
- 10 ft. (3 m) work cable with clamp
- 10 ft. (3 m) industrial power cord (without plug) for single- or three-phase
- Factory-installed gas solenoid
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix
- Factory-installed, low-mounted running gear/cylinder rack
- .047 in. (1.2 mm) U-groove drive rolls
- .047 in. (1.2 mm) aluminum Centerfire™ contact tips (#T-047AL)
- 8 in. (203 mm), 6 lb. (2.7 kg) spool of Hobart .047 in (1.2 mm) 5554 aluminum wire

Most popular accessories

- Spoolmatic® Spool Guns (pg 19)
- XR™ Air-Cooled Push-Pull Guns (pg 20)
- Dual Cylinder Rack #195 299 (pg 106)
- Protective Cover #195 142 (pg 109)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	460 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
(#907 300 002) 200/230/460 V	Three-phase	25–400	300 A at 32 VDC, 60% duty cycle	34	30	15	11.6	11.5	**MIG gun** 50–700 ipm (1.3–17.8 m/min.) **Optional spool gun/push-pull gun** 50–800 ipm (1.3–20 m/min.)	**Solid steel** .023–.045 in. (0.6–1.2 mm) **Stainless** .030–.045 in. (0.8–1.2 mm) **Aluminum** .035–.047 in. (0.9–1.2 mm) **Metal-cored** .035–.052 in. (0.9–1.3 mm) **Flux-cored** .030–.052 in. (0.8–1.3 mm)	H: 34 in. (863 mm) W: 19 in. (483 mm) D: 41 in. (1,041 mm)	181 lb. (82 kg)
	Single-phase			69	61	30	13.1	11.2				

Miller recommends

BERNARD™

Bernard semi-automatic MIG guns and consumables have been used and trusted for decades by top companies in agriculture, shipbuilding and fabrication. This is why Miller not only recommends Bernard MIG guns but also pairs these guns with many of their industrial wire feeders and power sources.

To learn more about Bernard MIG guns and the Miller equipment that they are offered with, please **see page 47** in this catalog.

For information on additional Bernard MIG gun options and for detailed technical support information, please visit **BernardWelds.com** or your local distributor to learn more.

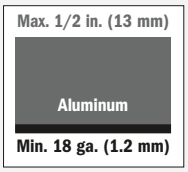
Questions? Call 1-855-MIGWELD (644-9353)

Millermatic® 350P Aluminum

See literature no. DC/12.56

Millermatic 350P Aluminum with XR-Aluma-Pro Lite gun shown.

Welding Capability



Aluminum welding uses optional Aluma-Pro push-pull gun. Not compatible with standard MIG gun.

True torque feed motor push-pull design provides continuous push force to the wire while the gun motor controls the speed at the gun. The motors work together to provide accurate and positive wire feed speed without wire shaving or deformation.

Electronic wire spool brake allows wire spool to free spool while welding resulting in smooth wire delivery.

Built-in aluminum pulsed MIG programs for simplicity and improved puddle control. Pulsed welding virtually eliminates burn-through and warping issues on thinner materials.

Synergic MIG and synergic pulsed MIG provide communication between power source, feeder and gun. As wire speed increases/decreases, the pulse or MIG parameters also increase/decrease to match the right amount of power needed.

Trigger schedule select allows operator to change between two sets of weld parameters.

Trigger hold reduces operator fatigue on extended welds.

Standard jog and purge.

Industrial ● CV DC 3 Phase 1 Phase

Processes
- Aluminum MIG (GMAW)
- Aluminum pulsed MIG (GMAW-P)

Comes complete with
- 10 ft. (3 m) work cable with clamp
- 10 ft. (3 m) industrial power cord (without plug) for single- or three-phase
- Factory-installed gas solenoid
- Flow gauge regulator and gas hose for argon
- Factory-installed, low-mounted running gear/cylinder rack
- .035 and .047 in. (0.9 and 1.2 mm) U-groove drive rolls for aluminum welding

Push-pull gun system includes above plus
- XR™ air-cooled push-pull gun (see choices far left in chart below)

Most popular accessories
- XR™ Air-Cooled Push-Pull Guns (pg 20)
- Dual Cylinder Rack #195 299 (pg 106)
- Protective Cover #195 142 (pg 109)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Note: See aluminum solutions comparison chart on page 14.

Model/Stock Number	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	460 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
Millermatic 350P Aluminum Push-Pull Gun System **(#951 451)** w/15 ft. XR-Aluma-Pro™ air-cooled gun **(#951 452)** w/25 ft. XR-Aluma-Pro™ air-cooled gun **(#951 453)** w/25 ft. XR™-Pistol Pro air-cooled gun **(#951 454)** w/25 ft. XR-Aluma-Pro™ Lite air-cooled gun **Millermatic 350P Aluminum (gun NOT included)** **(#907 474)** 200/230/460 V, standard unit	Three-phase	25–400	300 A at 32 VDC, 60% duty cycle	34	30	15	11.6	11.5	**Optional spool gun/ push-pull gun** 50–800 ipm (1.3–20 m/min.)	**Aluminum** .035–.047 in. (0.9–1.2 mm)	H: 34 in. (863 mm) W: 19 in. (483 mm) D: 41 in. (1,041 mm)	181 lb. (82 kg)
	Single-phase			69	61	30	13.1	11.2				

Feeding Aluminum

Choose the Right Gun Solution

Push-only guns (pg 11/47) — UPGRADE → **Spool guns** (pg 18/19) — UPGRADE → **Push-pull guns** (pg 20)

Also known as standard MIG guns, these guns are only used for occasional aluminum work.

- Typically used with hard wire or flux-cored wires in general manufacturing
- For aluminum, guns should be limited to 12-foot lengths and configured with correct aluminum liner and consumables

Integrated wire spools and better feedability make spool guns great for repair and small jobs.

- Low initial cost versus push-pull guns
- Works with many power sources
- Light and simple to use
- Usually lower duty cycles
- Limited deposition because of wire size

Preferred guns for production work with the best overall aluminum wire feedability.

- Built for longevity
- Can feed various wire sizes
- Great arc starts and performance
- Higher duty cycles and amp ratings
- Air- and water-cooled models

Learn more at MillerWelds.com/aluminum

AlumaFeed® Synergic Aluminum Welding System

See literature no. DC/34.0

Dedicated aluminum system for the most advanced MIG and synergic pulsed MIG performance.

AlumaPower 350 MPa and XR-AlumaFeed with XR-Aluma-Pro gun air-cooled package (#951 147) shown.

EQUIP to WELD™ *Build your own system at* ***MillerWelds.com/equiptoweld*** *or see packages below.*

AUTO-LINE™ Power Management Technology AlumaPower™ 350 model allows for any input voltage hookup (208–575 V, single- or three-phase) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power. *450 model is 230/460 V manual link or 575 V, three-phase only.*

Synchronized, true push-pull wire feed system for precise wire feeding and arc performance.

Profile Pulse™ provides TIG appearance with MIG simplicity and productivity. Achieve "stacked dimes" without gun manipulation. Profile Pulse frequency can be changed to increase or decrease the spacing between the ripple pattern to achieve the desired weld appearance.

Synergic pulsed MIG. As wire speed increases/decreases, pulse parameters also increase/decrease to match the right amount of power needed, eliminating the need to make additional adjustments.

Built-in MIG and pulsed MIG programs automatically set the optimal parameters for a wide variety of wires making it easy to set up and use.

Parameter and system locks enhance quality assurance and protect weld consistency.

Trigger schedule select allows operator to change between two sets of weld parameters.

Heavy industrial

CV DC 3 Phase 1 Phase *AlumaPower 450 is 3-phase only.*

Processes

- Aluminum MIG (GMAW)
- Aluminum pulsed MIG (GMAW-P)

Most popular accessories

- XR™ Push-Pull Guns (pg 20)
- MIGRunner™ Cart #195 445 (pg 107)
- Coolmate™ 3 #043 007 (pg 107)
- Coolant #043 810 (pg 107)
- Industrial MIG 4/0 Kits (pg 109)
  - #300 405 With Dinse connectors (350 MPa only)
  - #300 390 With lug connectors (450 MPa only)
  - Consists of flowmeter regulator with 10 ft. (3 m) gas hose, 10 ft. (3 m) 4/0 feeder weld cable, and 15 ft. (4.6 m) work cable with 600-amp C-clamp.
- Extension Cables (pg 114)
  - #247 831 025 25 ft. (7.6 m)
  - #247 831 050 50 ft. (15 m)
  - #247 831 080 80 ft. (24.4 m)
- 1/16-Inch (1.6 mm) Liner and Wire Kit for Gun #230 708
- 1/16-Inch (1.6 mm) Drive Roll Kit for Control Box #195 591
- For gun and feeder remote options, please refer to spec sheet or visit MillerWelds.com.

When purchasing components separately, visit MillerWelds.com/equiptoweld or your distributor for other Miller® options and accessories.

Models/Packages

**Additional packages are available – visit MillerWelds.com or your distributor.*

Power Source Only Stock Number	Package Stock Number*	XR-AlumaFeed Feeder	XR-Aluma-Pro™ Push-Pull MIG Gun	XR™-Pistol Grip Push-Pull MIG Gun	Industrial MIG 4/0 Kit	Coolmate™ with Coolant	Cart
AlumaPower 350 MPa **(#907 420)** 208–575 V **(#907 420 001)** 208–575 V with auxiliary power	**(#951 147)** w/350 model (#907 420)	**(#300 509)**	25 ft. air-cooled	–	–	–	–
	(#951 149) w/350 model (#907 420)	**(#300 509)**	–	30 ft. air-cooled	–	–	–
	(#951 151) w/350 model (#907 420)	**(#300 509)**	25 ft. air-cooled	–	With Dinse connectors	–	MIGRunner cart
AlumaPower 450 MPa **(#907 483)** 230/460 V with auxiliary power **(#907 484)** 575 V with auxiliary power	**(#951 460)** w/450 model (#907 483)	**(#300 509)**	25 ft. air-cooled	–	–	–	–
	(#951 459) w/450 model (#907 483)	**(#300 509)**	25 ft. air-cooled	–	With lug connectors	–	MIGRunner cart
	(#951 558) w/450 model (#907 483)	**(#300 509)**	–	30 ft. water-cooled	–	Coolmate 3	–
	(#951 559) w/450 model (#907 483)	**(#300 509)**	25 ft. water-cooled	–	With lug connectors	Coolmate 3	MIGRunner cart

Note: All packages listed include gun drive rolls, feeder drive rolls and consumables for .035- and 3/64-inch (0.9 and 1.2 mm) wire. All systems come set up out of the box to run 3/64-inch wire. 1/16-inch consumables not included – order separately above.
See aluminum solutions comparison chart on page 14.

Model	Input Power	Amp/Volt Ranges	Rated Output	Amps Input at Rated Load Output, 60 Hz 208 V	230 V	400 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
AlumaPower 350 MPa	Three-phase	5–425 A 10–38 V	350 A at 34 VDC, 60% duty cycle	40.4	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC	H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)	80 lb. (36.3 kg)
	Single-phase	5–425 A 10–38 V	300 A at 32 VDC, 60% duty cycle	60.8	54.6	29.7	24.5	19.9	11.7	11.2			
AlumaPower 450 MPa	Three-phase	15–600 A 10–38 V	450 A at 36.5 VDC, 100% duty cycle	–	49.4	–	27.2	23.6	21.6 (23.5 on 575 V)	18.3	90 VDC	H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)	122 lb. (55.3 kg)

XR-AlumaFeed Wire Feeder	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
14-pin compliant, but only operates synergically w/MPa power sources	24 VAC, 5 A, 50/60 Hz	400 A at 100% duty cycle System duty cycle is limited to gun rating	50–900 ipm (1.3–22.9 m/min.)	.035–1/16 in. (0.9–1.6 mm) Requires wire kit #230 708 for gun and drive roll kit #195 591 for control box to run 1/16 in. (1.6 mm) wire	12 in. (305 mm)	H: 16 in. (406 mm) W: 9.5 in. (241 mm) D: 21.25 in. (540 mm)	42.5 lb. (19.2 kg)

Spoolmate™ Spool Guns

See literature no. M/1.45 (100), M/1.46 (150), M/1.47 (200) and M/1.5 (3035)

Reliable and economical spool guns designed for home hobbyists and light fabricators.

Spoolmate 100

Spoolmate 100 includes carrying case that holds gun and cable, extra contact tips, nozzle and wire (wire sold separately).

Spoolmate 100

Light industrial gun for 4043 series aluminum wire rated at 135 amps at 30 percent duty cycle.

12-foot direct-connect cable with heavy-duty strain relief provides extended reach and accessibility to your work.

Dual V-knurled drive rolls with adjustable tension control for consistent feeding of different types of wire.

Clear spool canister protects the wire and allows easy view of spool.

Includes carrying case, extra contact tips and nozzle.

NEW!

Spoolmate 150

Portable!

Spoolmate 150

Light industrial gun for 4000 or 5000 series aluminum wire rated at 150 amps at 60 percent duty cycle.

20-foot direct-connect cable with heavy-duty strain relief provides extended reach and accessibility to your work.

Heavy-duty head tube.

Dual V-knurled drive rolls with adjustable tension control for consistent feeding of different types of wire.

Clear spool canister protects the wire and allows easy view of spool.

Improved!

Spoolmate 200 now comes standard with heavy-duty head tube.

Spoolmate 200

Light industrial gun for 4000 or 5000 series aluminum wire rated at 160 amps at 60 percent duty cycle.

20-foot weld/control cables with strain relief and sheath provide extended reach and accessibility to your work.

Wire feed speed adjustment on the gun – not machine – for easy setup.

Easy access to drive assembly and drive rolls.

Two-stage trigger with built-in gas valve allows for gas preflow/postflow.

Toolless head tube removal allows easy replacement. Three optional head tubes.

Spoolmate 3035

Spoolmate 3035

Light industrial gun for 4000 or 5000 series aluminum wire rated at 150 amps at 60 percent duty cycle.

20-foot weld/control cables with strain relief and sheath provide extended reach and accessibility to your work.

Light weight and well balanced for operator comfort.

Clear spool canister protects the wire and allows easy view of spool.

Easy-to-remove head tube assembly.

Light industrial ● CV DC

Use with CV, DC power sources.

Processes

- MIG (GMAW) with aluminum and other soft alloy wires
- MIG (GMAW) with hard wires

Suggested power sources

For Spoolmate 100

- Millermatic® 141 (pg 8)
- Millermatic® 190 (pg 8)
- Millermatic® 211 (pg 9)
- Multimatic™ 200 (pg 31)
- Syncrowave™ 210 TIG/MIG Complete (pg 53)

For Spoolmate 150

- Millermatic® 211 (pg 9)
- Multimatic™ 200 (pg 31) effective with serial number MF364047N

For Spoolmate 200

- Millermatic® 212 Auto-Set™ (pg 9)
- Millermatic® 252 (pg 10)

For Spoolmate 3035

- Direct connect to vintage Millermatic 210/212 tapped-voltage models
- Millermatic® 141/190/211/212 (pg 8/9) with SGA 100 control
- Bobcat™ 225 (pg 68) with SGA 100C control

Most popular accessories

For Spoolmate 200

- 45-Degree Head Tube #300 591
- 9-Inch Extension Head Tube #300 592
- 5-Inch Head Tube #243 385
- Spoolmatic Adapter Cable #195 287 Allows connection to older Millermatic 210 and 212 (non-Auto-Set).

For Spoolmatic 3035

- SGA 100 #043 856 (pg 114)
- SGA 100C #043 857 (pg 114)
- Heavy-Duty Head Tube #195 375

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model/ Stock Number	Welding Current Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight with Cable Assembly
Spoolmate 100 (#300 371)	135 A at 30% duty cycle	5–625 ipm (1.7–15.9 m/min.) Wire speed dependent on power source used	**Aluminum** .030–.035 in. (0.8–0.9 mm) **Solid steel** .023–.035 in. (0.6–0.9 mm) **Stainless** .023–.035 in. (0.6–0.9 mm)	4 in. (102 mm)	H: 11.5 in. (291 mm) W: 3 in. (76 mm) L: 13 in. (330 mm)	6 lb. (2.7 kg) 9 lb. (4.1 kg) with case
Spoolmate 150 (#301 272)	150 A at 60% duty cycle	115–715 ipm (2.9–18.1 m/min.) Wire speed dependent on power source used	**Aluminum** .030–.035 in. (0.8–0.9 mm) **Solid steel** .030–.035 in. (0.8–0.9 mm) **Stainless** .030–.035 in. (0.8–0.9 mm)	4 in. (102 mm)	H: 11.5 in. (291 mm) W: 3 in. (76 mm) L: 12.5 in. (318 mm)	7.3 lb. (3.2 kg)
Spoolmate 200 (#300 497)	160 A at 60% duty cycle,	70–875 ipm (1.8–22.2 m/min.)	**Aluminum** .030–.035 in. (0.8–0.9 mm) **Solid steel** .023–.035 in. (0.6–0.9 mm) **Stainless** .023–.035 in. (0.6–0.9 mm)	4 in. (102 mm)	H: 9 in. (229 mm) W: 2.5 in. (64 mm) L: 14.5 in. (368 mm)	11 lb. (5 kg)
Spoolmate 3035 (#195 016)	150 A at 60% duty cycle, 200 A at 60% duty cycle with optional heavy-duty head tube	115–715 ipm (2.9–18.1 m/min.)	**Aluminum** .030–.035 in. (0.8–0.9 mm) **Solid steel** .023–.035 in. (0.6–0.9 mm) **Stainless** .023–.035 in. (0.6–0.9 mm)	4 in. (102 mm)	H: 11.5 in. (291 mm) W: 2.25 in. (57 mm) L: 8 in. (203 mm)	9.1 lb. (4.1 kg)

Spoolmatic® Spool Guns

See literature no. M/1.73 (Spoolmatic) and M/1.76 (Spoolmatic Pro)

Portable, aluminum wire feeder for industrial applications.

Spoolmatic

Portable!

Spoolmatic Pro

Spoolmatic

Cost-effective, industrial aluminum spool gun.

Integrated spool canister rotates 180 degrees for operator flexibility and comfort.

Available in 15- or 30-foot cable lengths, providing flexibility to be used in the shop and in the field.

Two-stage trigger with built-in gas valve allows for gas preflow, and eliminates the need to purge long gas lines.

Wire feed speed adjustment on the gun handle and reversible drive rolls save time and money.

Quick-change, single-turn contact tip provides excellent performance and is easy to replace.

Spoolmatic Pro additional features

The most reliable, easy-to-use spool gun in the industry for the professional welder.

Wire tension settings. 4000- or 5000-specific tension settings ensure the very best wire feeding performance and arc consistency.

More durable motor and drive design improves feedability and arc consistency while helping reduce downtime and maintenance costs.

Easy access to drive assembly and removable toolless head tube reduce service time, by allowing a simple means of changing drive rolls and head tube – or performing routine maintenance without disassembly of gun.

Easy-to-rotate, self-seating head tube allows for better access into tight spots, preventing leaks and providing excellent current transfer. Head tubes are common with the XR-Aluma-Pro gooseneck-style guns.

Head tube options in several different lengths and bend configurations are available for use when a standard head tube doesn't fit the application.

Industrial ● CC/CV DC

Use with CC/CV, DC power sources.

Processes

- MIG (GMAW) with aluminum and other soft alloy wires
- MIG (GMAW) with hard wires
- Pulsed MIG (GMAW-P) with optional pulsing power source

Suggested power sources

- Millermatic® 212 Auto-Set™ (pg 9)
- Millermatic® 252 (pg 10)
- Millermatic® 350P/350P Aluminum (except Spoolmatic Pro) (pg 10/15/16)
- Shopmate™ 300 DX (pg 31)
- Bobcat™ Series (pg 68) – with SGA 100C control

These power sources require WC-24 control (#137 549)

- CP-302 (pg 12)
- Deltaweld® Series (pg 12)
- Invision™ MPa (pg 13)
- AlumaPower™ MPa (pg 17)
- Dimension™ Series (pg 32/33)
- XMT® Series (except VS model) (pg 34/36)
- Trailblazer® Series (pg 70)

Most popular accessories

- WC-115A #137 546 (pg 114)
- WC-115A (with contactor) #137 546-01-1 (pg 114)
- WC-24 #137 549 (pg 114)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

**Spoolmatic Pro requires wire kit #230 708 to run 1/16 in. (1.6 mm) wire.*

Model/Stock Number	Welding Current Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Gun Only Net Weight
Spoolmatic **(#195 156)** 15 ft. (4.5 m) cable **(#130 831)** 30 ft. (9 m) cable	200 A at 100% duty cycle	70–875 ipm (1.8–22.2 m/min.) Wire speed dependent on control or Millermatic used	**Aluminum*** .030–1/16 in. (0.8–1.6 mm) **Hard wire** .030–.045 in. (0.8–1.1 mm)	4 in. (102 mm)	H: 10.25 in. (260 mm) W: 2.5 in. (64 mm) L: 15.125 in. (384 mm)	2.9 lb. (1.3 kg)
Spoolmatic Pro **(#301 147)** 15 ft. (4.5 m) cable **(#301 148)** 30 ft. (9 m) cable	200 A at 100% duty cycle	70–900 ipm (1.8–23 m/min.) Wire speed dependent on control or Millermatic used			H: 10.75 in. (273 mm) W: 2.5 in. (64 mm) L: 15.375 in. (390 mm)	3.0 lb. (1.4 kg)

XR™ Push-Pull Guns

See literature no. M/1.75 (Aluma-Pro Lite), M/1.71 (Aluma-Pro), M/1.73 (Pistol) and M/1.74 (Pistol-Pro)

XR-Aluma-Pro and XR-Pistol guns work in conjunction with XR Controls, XR-AlumaFeed or select Millermatic machines to provide the best solution for push-pull applications.

XR-Aluma-Pro Lite

XR-Aluma-Pro

Portable!

Threaded quick-change 360-degree rotatable head tubes are available in different bends and lengths for even those hard-to-reach welds. Over 30 different styles to fit your application and welder's preference.

Wire tension settings (except XR-Pistol). 4000- or 5000-specific tension settings ensure the very best wire feeding performance and arc consistency.

Heavy-duty construction. All internal components are designed to provide long lasting performance and feeding precision.

XR-Aluma-Pro™ Lite

Lightest weight gooseneck-style gun features rear trigger that allows access to hard-to-reach welds.

XR-Aluma-Pro™

Robust professional-grade gun has the highest duty cycle rating in its class.

Easy access to drive assembly and removable toolless head tube reduce service time, by allowing a simple means of changing drive rolls and head tube – or performing routine maintenance without disassembly of gun.

XR-Pistol

XR™-Pistol

Reliable, cost-effective gun for light- to medium-industrial applications.

XR-Pistol-Pro

XR™-Pistol-Pro

Exceptional aluminum welding results for heavy-industrial applications.

Most durable motor and drive design improves feedability and arc consistency while helping reduce downtime and maintenance costs.

Easy access to drive assembly and removable toolless head tube reduce service time, by allowing a simple means of changing drive rolls and head tube – or performing routine maintenance without disassembly of gun.

Industrial ● *XR-Aluma-Pro Lite*
Heavy industrial ● *XR-Aluma-Pro and all Pistol models*

CC/CV DC *Use with CC/CV, DC power sources.*

Processes
- MIG (GMAW) with aluminum wire (capable of other wires with optional hardwire kits)
- Pulsed MIG (GMAW-P) with optional pulsing power source

Suggested feeders/controls
- XR-AlumaFeed® (pg 17)
- XR™-S Control (pg 21)
- XR™-D Control (pg 21)

Suggested power sources
- Millermatic® 252 (pg 10)
- Millermatic® 350P/350P Aluminum (pg 10/15/16)

These power sources require XR-AlumaFeed (pg 17) or XR-Control (pg 21)
- Deltaweld® Series (pg 12)
- Invision™ MPa (pg 13)
- AlumaPower™ MPa (pg 17)
- XMT® Series (except VS model) (pg 34/36)
- Trailblazer® Series (pg 70)

Most popular accessories
- Hardwire Liner Kit #198 377

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

*Dependent on control box or Millermatic used. **Wire kit #230 708 required to run 1/16 in. (1.6 mm) wire.

Model	Cable Length 15 ft. (4.6 m)	25 ft. (7.6 m)	30 ft. (9 m)	35 ft. (10.6 m)	Welding Current Rating	Wire Feed Speed*	Wire Type and Diameter Capacity	Dimensions	Gun Only Net Weight
XR-Aluma-Pro Lite (Air-cooled)	–	**(#300 948)**	–	–	175 A at 60% duty cycle	70–900 ipm (1.8–23 m/min.)	**Aluminum** .030–.047 in. (0.8–1.2 mm)	H: 4 in. (102 mm) W: 1.9 in. (48 mm) L: 15 in. (381 mm)	2.0 lb. (0.9 kg)
XR-Aluma-Pro (Air-cooled)	**(#300 000)**	**(#300 001)**	–	**(#300 264)**	300 A at 100% duty cycle	70–900 ipm (1.8–23 m/min.)	**Aluminum**** .030–1/16 in. (0.8–1.6 mm)	H: 5 in. (127 mm) W: 2.5 in. (64 mm) L: 17 in. (432 mm)	2.5 lb. (1.1 kg)
XR-Aluma-Pro (Water-cooled)	**(#300 003)**	**(#300 004)**	–	**(#300 265)**	400 A at 100% duty cycle				2.9 lb. (1.3 kg)
XR-Pistol (Air-cooled)	**(#198 127)**	–	**(#198 128)**	–	200 A at 100% duty cycle	70–875 ipm (1.8–22.2 m/min.)	**Aluminum** .030–1/16 in. (0.8–1.6 mm)	H: 7.375 in. (187 mm) W: 1.875 in. (48 mm) L: 10.625 in. (270 mm)	2.2 lb. (1 kg)
XR-Pistol (Water-cooled)	**(#198 129)**	–	**(#198 130)**	–	400 A at 100% duty cycle				2.4 lb. (1.1 kg)
XR-Pistol-Pro (Air-cooled)	**(#300 782)**	**(#300 783)**	–	**(#300 784)**	200 A at 100% duty cycle	70–900 ipm (1.8–23 m/min.)	**Aluminum**** .030–1/16 in. (0.8–1.6 mm)		2.2 lb. (1 kg)
XR-Pistol-Pro (Water-cooled)	**(#300 786)**	**(#300 787)**	–	**(#300 788)**	400 A at 100% duty cycle				2.4 lb. (1.1 kg)

XR™ Controls

See literature no. M/1.7

Standard aluminum wire feeding system for fabrication and manufacturing, consisting of a control box and push-pull gun. Beneficial for difficult-to-feed wire types.

XR-S XR-D

Portable!

Includes *both .035 and factory-installed 3/64 in. drive rolls. Order 1/16 in. control box drive roll kit (#195 591) separately.*

XR-S

Simple, cost-effective push-pull feeder for industrial applications.

True torque feed motor push-pull design provides continuous push force to the wire while the gun motor controls the speed at the gun. The motors work together to provide accurate and positive wire feed speed without wire shaving or deformation.

Digital meters ensure accuracy when presetting and reading actual wire feed speed or voltage.

Trigger hold for making long weldments without hand fatigue.

Adjustable wire run-in control allows arc start fine tuning. Reduces wire stubbing or arc flaring which can result in contact tip burnback.

XR-D additional features

Adds basic programmable weld sequencing that allows adjustments for preflow, postflow, start, and crater providing higher quality welds.

Heavy industrial CC/CV DC

Use with CC/CV, DC power sources.

Processes
- MIG (GMAW) with aluminum and other soft alloy wires
- Pulsed MIG (GMAW-P) with optional pulsing power source

Suggested guns
- Push-pull guns (pg 20)

Suggested power sources
- Deltaweld® Series (pg 12)
- Invision™ MPa (pg 13)
- AlumaPower™ MPa (pg 17)
- XMT® Series (except VS model) (pg 34)
- Trailblazer® Series (pg 70)

Most popular accessories
- Extension Cables (pg 114)
- PSA-2 Control (pg 114)
- Gas Flowmeter Kit #246 127

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model/Stock Number	Input Power	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
XR-S (#300 601) **XR-D (#300 687)**	24 VAC, 50/60 or 100 Hz	50–900 ipm (1.3–23 m/min.)	**Aluminum** .030–1/16 in. (0.8–1.6 mm) Requires drive roll kit #195 591 to run 1/16 in. (1.6 mm) wire	12 in. (305 mm)	H: 16 in. (406 mm) W: 9.25 in. (235 mm) D: 21.25 in. (540 mm)	42.5 lb. (19.2 kg)

Miller recommends

HOBART FILLER METALS

Hobart® aluminum filler metals — wire and cut lengths — have been designed to provide the best performance for the best welds. These products are backed by the deep industry knowledge of Hobart welding specialists who can help customers find the right aluminum filler metal solution. Every time. No matter how challenging the application.

Visit **HobartBrothers.com** or your local distributor to learn more.

Questions? Hobart is here to help.

Axcess® and Auto-Axcess™ Systems

See literature no. DC/8.0 (Access) and AU/8.0 (Auto-Axcess)

Advanced industrial MIG systems for both hand-held and robotic applications, which improve arc performance and productivity.

Build your own system at ***MillerWelds.com/equiptoweld*** *or see packages below.*

Auto-Axcess 450 shown with required AA-40GB motor (ordered separately).

Axcess 450 MIGRunner package (#951 228) shown.

Automated MIG applications may require additional support to ensure the system and components needed are properly selected and installed. Contact Miller at ***1-920-954-3813.***

AUTO-LINE Power Management Technology Allows for any input voltage hookup (208–575 V, single- or three-phase) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable input power.

Accu-Pulse® provides shorter arc lengths, along with a more focused arc column, which provides significantly improved puddle control and arc stability. Accu-Pulse also improves welding in tight corners without arc wandering as well as greatly reduced spatter.

SureStart® technology provides consistent arc starts by precisely controlling power levels for specific wire and gas combinations.

AA-40GB wire drive motor assembly with OCP (over current protection) to protect against current surges**.** Direct-panel-mounted to eliminate motion stress on the motor's power and tachometer feedback wires. (Required for Auto-Axcess and used for Axcess remote configurations.)

Welding Intelligence.™ Increase productivity, improve quality and manage costs with Insight Core™ and Insight Centerpoint™ welding information management systems (see pages 24 and 25).

Various wire feeding options for Axcess available. See literature no. DC/8.0 for more information.

Multi-MIG® Welding Process Capabilities

Process	Standard Spray	Pulsed Spray	Accu-Pulse,® Accu-Curve™ Accu-Speed™ (Optional)	Standard Short Circuit	RMD® Regulated Metal Deposition (Optional)
Weld Puddle Control	Flat/Horizontal		All Position Performance		Thin Materials/Gap Filling

Note: Look for high-speed video clips of Accu-Pulse, Accu-Curve, Accu-Speed and front panel simulator at ***MillerWelds.com/advanced****.*

Models/Packages

**Additional packages are available – visit MillerWelds.com or your distributor.*

***Order wire drive motor assembly and required motor control cable length separately.*

Axcess 300 (#907 150) shown.

Axcess 450 stationary package (#951 229) shown.

Axcess 450 MIGRunner package (#951 228) shown.

Power Source Only Stock Number		Stationary Package Stock Number*	MIGRunner Package Stock Number*
Axcess 300 (#907 150)	Auto-Axcess 300 (#907 151)**	**(#951 227)** with Axcess 300 (#907 150)	**(#951 226)** with Axcess 300 (#907 150)
Axcess 450 (#907 152)	Auto-Axcess 450 (#907 153)**	**(#951 229)** with Axcess 450 (#907 152)	**(#951 228)** with Axcess 450 (#907 152)
Axcess 675 (#907 154)	Auto-Axcess 675 (#907 155)**	–	–

Industrial ● *300 models*
Heavy industrial ● *450/675 models*

CC CV CV DC 3 Phase *Auto-Axcess is CV only.*

Processes

Multi-MIG

- Accu-Pulse MIG (GMAW-P)
  - Accu-Curve
  - Accu-Speed (optional)
  - Accu-Pulse tandem (factory option available on Auto-Axcess only)
- Pulsed MIG (GMAW-P) ▪ MIG (GMAW)
- Metal-cored ▪ RMD (optional)
- Air carbon arc gouging (CAC-A) can also be activated

Stationary package includes

- Axcess power source
- Axcess feeder with Bernard™ BTB Gun and drive rolls
- DeviceNet interconnecting feeder control cable
- Industrial MIG 4/0 kit consisting of flowmeter regulator with 10 ft. (3 m) gas hose, 10 ft. (3 m) 4/0 feeder weld cable with lugs, and 15 ft. (4.6 m) work cable with 600-amp C-clamp.

MIGRunner™ package includes above plus

- Running gear cylinder rack (pg 107)

Wire feeding options

(see lit. no. DC/8.0 and AU/8.0 for more information and required cables)

- Axcess Feeders
  #951 311 Single-wire
  #951 431 Dual-wire
- Axcess ROI Swingarc™ Boom-Mounted Feeders
- Single- and Dual-Remote Configurations
- AA-40GB Wire Drive Motor (includes 50 ft. volt-sense lead)
  #195 426 Left-hand drive
  #195 515 Right-hand drive

Note: AA-40GB wire drive motor is required for Auto-Axcess and used for Axcess remote configurations.

Most popular accessories

- Axcess File Management Software for PC #300 529
- Industrial MIG 4/0 Kit (with lug connectors) #300 390 (pg 109)

The following are for Auto-Axcess only

- Coolant Flow Switch (pg 106)
- Receptacle/Adapter Kits (one required per machine) #194 793 (ABB®), #194 791 (FANUC®), #194 790 (Motoman®), #300 056 (Panasonic®) and #195 002 (Universal)
- Smart Adapter #300 012 (enables semi-automatic function)
- FANUC/Motoman Motor Bracket #300 013

Model	Amp/Volt Ranges	Rated Output	Amps Input at Rated Output, 50/60 Hz, 3-Phase 208 V	230 V	400 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
Axcess 300 and Auto-Axcess 300	5–400 A, 10–44 V	300 A at 29 VDC, 60% duty cycle	33	29.7	16.9	14.6	11.6	11.7	11.2	80 VDC	300 H: 23 in. (584 mm) 450 H: 31 in. (787 mm) 675 H: 39 in. (991 mm) W: 17 in. (432 mm) D: 22.5 in. (572 mm)	112 lb. (50.8 kg)
Axcess 450 and Auto-Axcess 450	5–600 A, 10–44 V	450 A at 36.5 VDC, 100% duty cycle	–	60	33.7	28.8	22.8	23.8	22.9	80 VDC		163 lb. (73.9 kg)
Axcess 675 and Auto-Axcess 675	5–900 A, 10–44 V	675 A at 38 VDC, 100% duty cycle	–	89.7	–	43.7	34.8	35.7	34.4	80 VDC		215 lb. (97.5 kg)

Continuum™ Systems

See literature no. DC/36.0

New generation of advanced industrial welding solutions improves productivity through weld quality, ease of use and system flexibility.

Continuum 350 model shown with MIGRunner package. Filler metal sold separately.

Improved processes

New Versa-Pulse™ and improvements to Accu-Pulse,® RMD® and MIG processes allow you to take the performance of each process to the highest level.

All-new power source design

Smart and powerful digital design has the fast response needed to deliver the most stable welding performance for better welding results.

Flexible to meet current and future needs with integrated expansion capabilities.

Welding Intelligence.™ Increase productivity, improve quality and manage costs with Insight Core™ (standard) and Insight Centerpoint™ (optional) welding information management systems (see pages 24 and 25).

All-new feeder design

Tru-Feed™ technology provides precise feeding operation for stable arc performance.

- **New low-inertia motor** provides faster response for the best arc starts with the least amount of spatter
- **Balanced-pressure drive-roll design and tensioners** feed wire in its truest and straightest form for consistent feedability, resulting in better welding performance

New user interface makes the system easy to set up and adjust with minimal training.

Continuum Processes

Best For	Standard Spray	High-Deposition MIG	Accu-Pulse	Versa-Pulse	Short Circuit	RMD
Deposition	A	A	A	B	D	D
Gap Filing	D	D	B	B	A	A
Low Heat Input	D	C	B	A	A	A
Out-of-Position Welds			A	B	B	B
Low Spatter	A	A	A	B	C	B
Thick Metals	A	A	A	C	D	D
Thin Metals			B	A	A	A
Increased Travel Speed	A	A	A	A	B	C
HOT → COLD						

Ratings A, B, C, and D *are relative values. An "A" rating indicates a best fit between your performance needs and process. A "blank" rating indicates that the process is not recommended for that application.*

Accu-Pulse *is the most popular process for majority of industrial welding applications.*

Versa-Pulse *is a fast, low-heat, low-spatter process designed for thin-material applications.*

RMD *is a low-heat modified short-circuit process designed to fill gaps with thin-material applications.*

High-deposition MIG *provides increased deposition rates over standard spray on thicker materials.*

Note: As the technological advances offered by Continuum extend beyond the capability of Axcess systems, the two systems are not compatible. Continuum systems are designed to allow future upgradability, to expand with your operation's needs.

**While idling.*

Heavy industrial ● CC/CV DC 3 Phase

Processes

- Accu-Pulse MIG (GMAW-P)
- Versa-Pulse ▪ RMD ▪ MIG (GMAW)
- High-deposition MIG (GMAW)
- Air carbon arc gouging (CAC-A)

MIGRunner™ package includes

- Continuum power source
- Continuum single feeder with Bernard™ BTB Gun 400 A and .035/.045 in. V-groove drive rolls
- Continuum running gear/cylinder rack
- 3 ft. (0.9 m) control/motor cable
- Industrial MIG 4/0 kit consisting of flowmeter regulator with 10 ft. (3 m) gas hose, 10 ft. (3 m) 4/0 feeder weld cable with lugs, and 15 ft. (4.6 m) work cable with 600-amp C-clamp.

Wire feeding options

- Continuum Feeders
  #951 631 Single-wire
  #951 673 Dual-wire
  Includes Bernard BTB Gun 400 A (two with dual-wire models) and .035/.045 in. V-groove drive rolls.
- Continuum Swingarc™ Boom-Mounted Feeders
  #951 633 8 ft. (2.4 m) single-wire
  #951 634 12 ft. (3.7 m) single-wire
  #951 635 16 ft. (4.9 m) single-wire
  Includes Bernard BTB Gun 400 A and .035/.045 in. V-groove drive rolls.
- See literature no. DC/36.0 for additional options

Most popular accessories

- Insight Centerpoint™ Software (pg 25)
- Bernard™ MIG Guns (pg 47)
- Continuum Running Gear/Cylinder Rack #301 264 (pg 107)
- Coolmate™ Coolant Systems (pg 107)
- Industrial MIG 4/0 Kit (with lug connectors) #300 390 (pg 109)
- Continuum Control/Motor Cables
  #263 368 003 3 ft. (0.9 m)
  #263 368 015 15 ft. (4.6 m)
  #263 368 020 20 ft. (6.1 m)
  #263 368 025 25 ft. (7.6 m)
  #263 368 050 50 ft. (15 m)
  #263 368 080 80 ft. (24.4 m)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Stock Number	Amp/Volt Ranges	Rated Output	Amps Input at Rated Output, 50/60 Hz, 3-Phase 230 V	380 V	400 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Machine Only Dimensions (Includes lift eye)	Machine Only Net Weight
Continuum 350	**(#907 636)** 230–575 V Machine only **(#907 636 001)** 230–575 V w/running gear **(#951 671)** 230–575 V MIGRunner package	20–400 A, 10–44 V	350 A at 34 VDC, 100% duty cycle	36.7 0–1*	21.8 0–1*	20.8 0–1*	18.8 0–1*	14.6 0–1*	14.4 0.8*	13.8 0.17*	75 VDC	H: 27.187 in. (691 mm) W: 17.5 in. (444 mm) D: 28.125 in. (714 mm)	127 lb. (57.6 kg)
Continuum 500	**(#907 640)** 230–575 V Machine only **(#907 640 001)** 230–575 V w/running gear **(#951 672)** 230–575 V MIGRunner package	20–600 A, 10–44 V	500 A at 40 VDC, 100% duty cycle	34.9 0–1 *	– –	33.2 0–1*	28.9 0–1*	23.3 0–1*	23.1 0.8*	21.9 0.17*	75 VDC		148 lb. (67.1 kg)

Model/Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
Continuum Feeder only **(#951 631)** Single-wire model **(#951 673)** Dual-wire model	50 VDC	500 A at 100% duty cycle	Standard: 50–1000 ipm (1.3–25.4 m/min.)	.035–5/64 in. (0.9–2.0 mm)	18 in. (457 mm), 60 lb. (27 kg)	H: 13.812 in. (351 mm) Single W: 16.312 in. (414 mm) Dual W: 17 in. (432 mm) D: 29.687 in. (754 mm)	**Single** 43 lb. (19.5 kg) **Dual** 61.5 lb. (27.9 kg)

Welding Intelligence™

Insight Welding Intelligence helps your operation be more competitive and profitable by delivering accurate, decision-ready information about your welding processes.

For more detailed information, visit
MillerWelds.com/insight

Knowledge to Drive Your Business Forward

Increase Productivity
Evaluate key indicators of operator productivity

Improve Weld Quality
Measure important indicators of weld quality

Manage Costs
Monitor and analyze welding costs

Insight Core™

A simplified, Internet-based weld data solution that collects, transmits and presents actionable information to any Web-connected device in the world.

Basic monitoring
- 14-pin provides arc-on time and weld parameters (volts/amps) and deposition (MPa feeder required)
- Axcess®/Auto-Axcess™ and Continuum™ provide arc-on time, deposition, wire feed speed, process, wire type/diameter, gas type and machine error codes

Wi-Fi and wired Ethernet connectivity are built into Insight Core for flexible integration with your company's information network.

No special software or applications required, for easier installation and more accessible reports.

Factory installed on Axcess®/Auto-Axcess™, Continuum™ and Dynasty® 280 DX with Insight power sources.

Compatible with 14-pin compliant Miller® power sources. See MillerWelds.com/insight for a list of 14-pin compatible power sources.

Factory-installed Insight Core Power Sources

#907 150 002 Axcess 300 with Insight Core
#907 152 002 Axcess 450 with Insight Core
#907 154 002 Axcess 675 with Insight Core
#907 151 004 Auto-Axcess 300 with Insight Core
#907 153 004 Auto-Axcess 450 with Insight Core
#907 155 006 Auto-Axcess 675 with Insight Core
#907 151 005 Auto-Axcess 300 DeviceNet with Insight Core
#907 153 005 Auto-Axcess 450 DeviceNet with Insight Core
#907 155 005 Auto-Axcess 675 DeviceNet with Insight Core
#907 636 Continuum 350
#907 640 Continuum 500
#907 514 003 Dynasty 280 DX with Insight

For more information regarding Axcess/Auto-Axcess power sources and DeviceNet see literature no. DC/8.0 or AU/8.0 respectively.

Field-installed Insight Core Upgrade Modules

#301 072* 14-pin compliant Miller power source module
#951 617 14-pin compliant Miller power source module w/S-74 MPa Plus wire feeder
#301 081 Axcess/Auto-Axcess module

**SubArc Digital Series requires Insight Core to SubArc Digital Series Adapter Kit (#301 295).*

Visit our online Insight Core simulator at
Insight-simulator.MillerWelds.com

Insight Core™

Focused on monitoring welding outputs

14-pin products (Deltaweld,® Dimension,™ Invision,™ XMT® and SubArc Digital)

Axcess®/Auto-Axcess,™ Continuum™ and Dynasty® 280 DX with Insight

Insight Centerpoint™

Brings advanced process control into weld cell

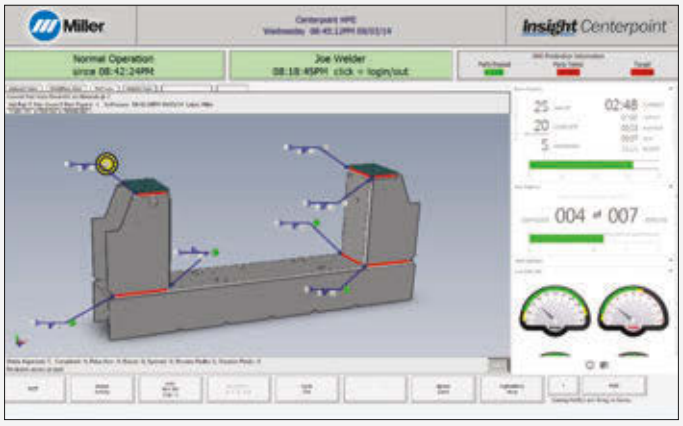
Axcess® E/Auto-Axcess™ E, Continuum™ and Dynasty® 280 DX with Insight

SOPHISTICATION OF INFORMATION AVAILABLE

For more information regarding Insight Core, Insight Centerpoint and software options visit ***MillerWelds.com/insight***

Insight Centerpoint™

Advanced, real-time operator feedback to provide process control — to maximize quality and efficiency in welding and fabrication.



Monitor and control

- Part Tracking™ — human machine interface (HMI) in the cell for real-time feedback; sequence and weld quality control; reports by part, arc time, welds, deposition, cell downtime and more
- Work Flow™ — welding and non-welding work instructions to govern the entire fabrication process
- Codes and Standards — captures required information relating actual welding parameters to the specific operator, contract, joint and weld pass to ensure productivity and quality requirements are met
- Optional Insight Reporter™ — Preconfigured management charts and reports that provide a wide range of information about weld process, productivity, and business metrics, stored in an SQL server database

Axcess® E/Auto-Axcess™ E, Continuum™ and Dynasty® 280 DX with Insight deliver complete software functionality.

Insight Pipe and Vessel
Tailored to the unique needs of pipe and vessel fabricators. PipeWorx 400 requires Insight Module (#301 304).

Advanced MIG Factory-installed Insight Centerpoint Power Sources

#907 440 Axcess E 300
#907 439 Axcess E 450
#907 441 Axcess E 675
#907 442 Auto-Axcess E 300 Analog
#907 443 Auto-Axcess E 450 Analog
#907 444 Auto-Axcess E 675 Analog
#907 497 Auto-Axcess E 300 Digital
#907 496 Auto-Axcess E 450 Digital
#907 495 Auto-Axcess E 675 Digital
#301 255 Insight Centerpoint single seat license
#301 256 Insight Centerpoint site license
#301 257 Advanced capability software (standard capability included)
#300 709 Insight Reporter single license (1 required per PC)
#300 710 Insight Reporter SQL database (1 required per facility)

For more information regarding Axcess E/Auto-Axcess E power sources see literature no. DC/8.05 or AU/9.5 respectively.

#907 636 Continuum 350
#907 640 Continuum 500
#301 255 Insight Centerpoint single seat license
#301 256 Insight Centerpoint site license
#301 297 Standard capability software
#301 257 Advanced capability upgrade (requires standard capability to use)
#301 322 Standard and advanced capability software
#300 709 Insight Reporter single license (1 required per PC)
#300 710 Insight Reporter SQL database (1 required per facility)

TIG Factory-installed Insight Centerpoint Power Sources

#907 514 003 Dynasty 280 DX with Insight
#301 316 Insight Centerpoint single seat license
#301 256 Insight Centerpoint site license
#301 314 Standard capability software
#301 323 Advanced capability upgrade (requires standard capability to use)
#301 315 Standard and advanced capability software
#300 709 Insight Reporter single license (1 required per PC)
#300 710 Insight Reporter SQL database (1 required per facility)

Field-installed Insight Centerpoint Upgrade Modules

#300 641 Axcess E module
#300 852 Auto-Axcess E Analog module
#300 648 Auto-Axcess E Digital module
#301 304 PipeWorx 400 module (only provides codes and standards)

Accessories

#3DM4015-45Q Insight LTD gun for Axcess E or Continuum
#300 677 Axcess E semi-automatic wire feeder
#300 726 Axcess E remote operator interface (ROI)
#300 734 9.8 ft. (3 m) M12/RJ45 ethernet cable
#300 735 16.4 ft. (5 m) M12/RJ45 ethernet cable
#300 736 32.8 ft. (10 m) M12/RJ45 ethernet cable
#195 480 Field application support

Automation

For more detailed information, visit **MillerWelds.com/automation**

To order automation solutions:
Contact local Miller district manager or email ***MWASales@MillerWelds.com***

For automation service/parts:
Call ***1-630-653-6819*** *or email* ***MWAService@MillerWelds.com***

PERFORMARC™ ROBOTIC WELDING SYSTEM

A family of pre-engineered solutions integrating Miller® welding technology to solve your manufacturing challenges.

Fast installation. Pre-wired and pre-assembled making set up fast and easy. Most systems are up and running in under two hours from delivery (connect power/wire/gas and mounting tooling).

Integrated controls. Control station and full-color teach pendant keep the operator informed, maximizing production uptime.

Flexibility. Fully welded frame allows for easy relocation and reconnection as production plans or layouts change.

Single-station load and unload A/B-style turntable configurations

PA250M 250 lb./side
60 in. manually indexed table

PA350S 350 lb./side
66 in. servo indexing table

PA750S/PA750SW 750 lb./side
92 or 108 in. servo indexing table

Side-by-side configurations — operator walks around system

Robot between dual head and tailstock/single- or dual-robot configuration

PA1100SS 1,100 lb./side
120 in. long x 44 in. turning diameter

PA2200SS 2,200 lb./side
120 in. long x 66 in. turning diameter

Single-station load and unload H-frame configurations

Dual head and tailstock/single- or dual-robot configuration

PA550H 550 lb./side
48 in. long x 34 in. turning diameter on 92 in. servo indexer

PA550HW 550 lb./side
PA1100HW 1,100 lb./side
60 in. long x 40 in. turning diameter on 108 in. servo indexer

Ferris wheel configurations — high-volume production

Dual head and tailstock/ single-, dual- or triple-robot configuration

PA1100FW 1,100 lb./side
118 in. long x 43 in. turning diameter

Automation components

Auto-Axcess™/Auto-Axcess™ E power sources

Panasonic® robots

Tregaskiss™ MIG guns

FILTAIR® system with low profile hood

Miller recommends Hobart® filler metals

Active Wire Process (AWP)

Active wire is an advanced short arc welding process combining the robot motion path, welder waveform and servo wire feed control simultaneously reversing the wire at the short circuit to control the weld deposition precisely.

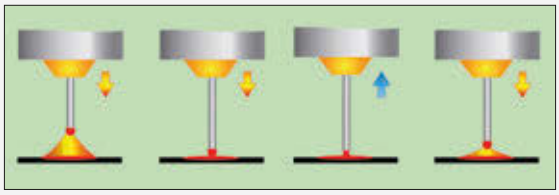
Spatter control. Spatter is virtually eliminated in all phases of the weld using mixed argon 90/10 or 100 percent CO_2 gas.

Fast and clean arc striking. At the moment the wire touches the base the wire is reversed, reducing arc strike spatter by up to 90 percent.

Flexibility. Large variations in torch angle are possible allowing push-pull in and out of corners without increasing spatter.

Appearance. The precise nature of the process allows many customers an alternative to TIG welding.

Wide range of materials. Mild steels, stainless steels and aluminum from thin to medium gauge benefit from AWP.



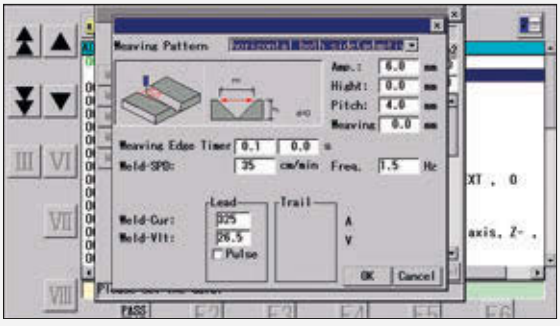
Thick Plate Welding

Fast and easy programming even on the most complex multi-pass weldments. All required commands and sensor setup in a single menu screen. Welding procedures can be developed quickly and transported easily from part to part.

Graphical, menu-driven interface. Pop-up graphical windows allow for fast programming of any welding joint in a single location.

Multi-layer path control. Easy-to-use interface to sequence the location of starts/stops and create multi-layer weld paths with appropriate offsets.

Advanced sensors. High-voltage touch sensing with menu-driven touch macros, a specialized high-amperage arc sensor system, and adaptive fill capability allow the weld process to adapt to incoming/varying production parts.



DeskTop Programming and Simulation (DTPS)

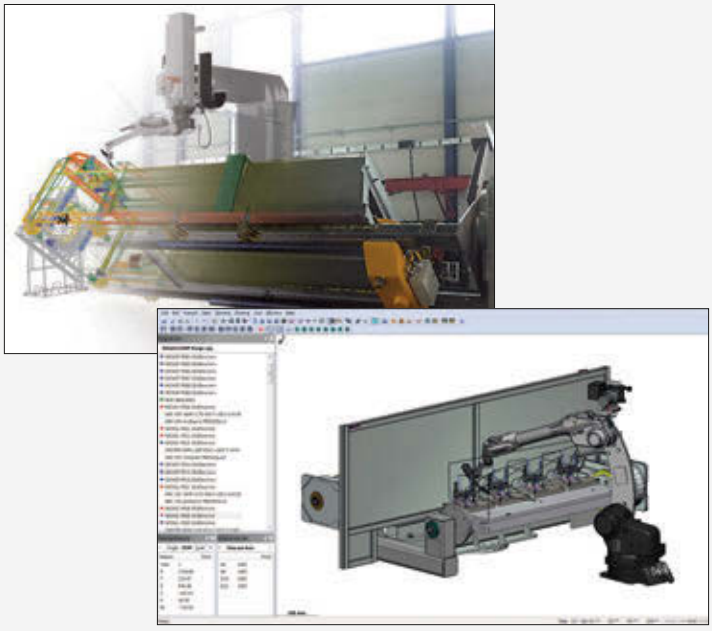
Software allows the development of programs offline, minimizing robot downtime and maximizing throughput and productivity.

Specialized software generates programs and simulates the actual taught paths from your desktop.

Cutting edge technology and innovation to manage the challenges of manufacturing and create customer success in metal fabrication.

Native language programming. Same language and functions that the technician will see on the teaching pendent, making program generation off-line easier than competitive code-based systems.

File transfer (from old to new). DTPS has the ability to transfer robot programs between robot types, sizes and controller generations with no additional formatting requirements.



Automation

To order automation solutions:
Contact local Miller district manager or email ***MWASales@MillerWelds.com***

For automation service/parts:
Call ***1-630-653-6819*** *or email* ***MWAService@MillerWelds.com***

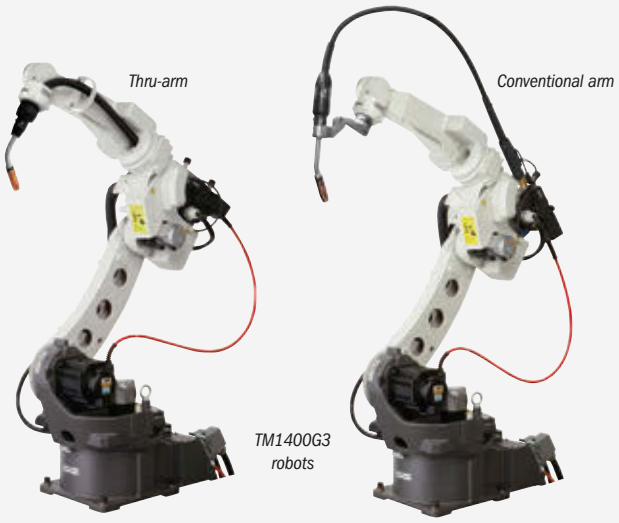
TM/TL Series Welding Robots

Best-in-class robot speed and greatly improved trajectory control — now 20 percent faster with 16 times better trajectory control than TA/TB Series robots. For thermal process applications including MIG, TIG or laser welding and plasma or laser cutting.

TM Series. Versatile design accepting conventional or thru-arm torch configurations.

TL Series. Dedicated design accepting conventional torch configurations (long arm, niche application support).

TM/TL Series features include
- Dedicated welding robot design (application specific)
- Collision detection software (reduced downtime)
- Password protection software (increased security)
- Automated program backup (program recovery)
- Advanced error recovery (better uptime)
- Axis mastering pins (improved maintenance)
- Optional wire conduit through the base axis (reduced maintenance)



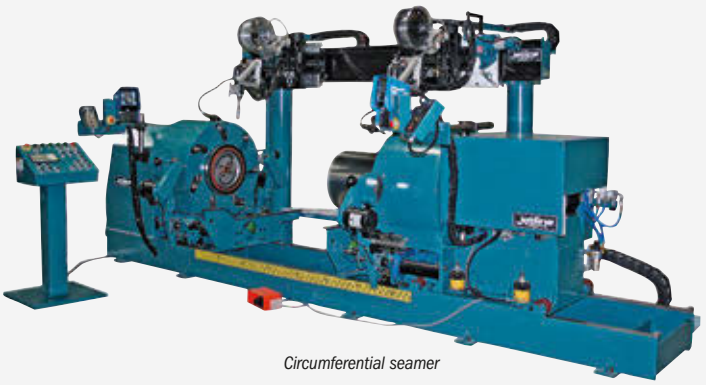
TM1400G3 robots

Model	Reach	Payload
TM1100	45.7 in. (1,163 mm)	12.2 lb. (6 kg)
TM1400	56.5 in. (1,437 mm)	12.2 lb. (6 kg)
TM1600	64.7 in. (1,645 mm)	8.8 lb. (4 kg)
TM1800	71.2 in. (1,809 mm)	12.2 lb. (6 kg)
TL1800	70.9 in. (1,801 mm)	17.6 lb. (8 kg)
TL2000	78.7 in. (1,999 mm)	12.2 lb. (6 kg)

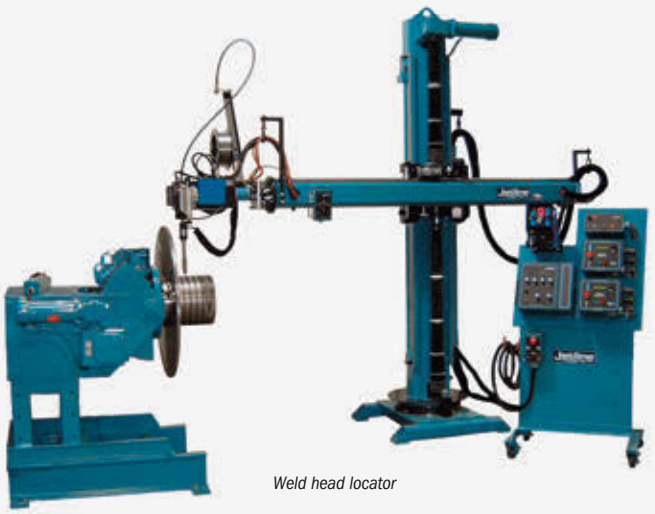
Fixed Automation

Fixed automation systems integrate MIG, submerged arc and TIG weld process solutions based on your application requirements.

Longitudinal seamers (LS) for straight line welding.
Circumferential seamers (CS) for circular welding.
Weld head locators (WHL) for customized welding.


Circumferential seamer

Longitudinal seamer


Weld head locator

Tregaskiss™ Robotic Guns

Air-Cooled MIG Guns

Available with all PerformArc® robotic welding systems, fully configurable TOUGH GUN™ robotic MIG guns are engineered for precision, durability, accuracy, repeatability, minimal downtime and fast and easy maintenance.

TOUGH GUN CA3 MIG Guns

See Tregaskiss literature no. SP-CA3

Designed for high-volume production environments.

Replaceable unicable reduces downtime through faster repair and extended service life.

Cable guide minimizes stress on cable connection as the robot articulates.

Re-engineered neck clamp improves durability and consistency of clamping force.

TOUGH GUN TA3 MIG Guns

See Tregaskiss literature no. SP-TA3

Designed for precise, repeatable performance on today's through-arm style robots.

Re-engineered neck clamp improves durability and consistency of clamping force.

Available as a complete package from the power pin to the contact tip.

Easy maintenance with minimal downtime.

MORE on the WEB

For more information or to configure your Tregaskiss robotic gun online, visit

Tregaskiss.com/ConfigureMyGun

Industrial

Process ▪ MIG (GMAW)

Suggested robots

- All Panasonic® TM/TL Series welding robots (pg 28)
- Also compatible with robots by ABB®, COMAU®, FANUC®, Kawasaki®, KUKA™, Motoman®, OTC Daihen® and Reis™ (CA3 only)

Packages

- PerformArc Robotic Welding Systems (pg 26)

Most popular accessories

TOUGH GUN TT3 Reamer equipped with optional wire cutter and lubricator.

- **TOUGH GUN TT3 Reamer**
  The perfect addition to your Miller® automation solution, this robotic nozzle cleaning station is tough on spatter and operates reliably in even the harshest welding environments. See Tregaskiss literature no. M086 for more information.
- TOUGH GARD™ Anti-Spatter Liquid

Visit Tregaskiss.com or your distributor for other Tregaskiss options and accessories.

Miller recommends Tregaskiss™

Robust. Resilient. Repeatable.

The robotic MIG welding guns and peripherals that **you** can rely on.

Tregaskiss understands that automated welding applications require reliable products that maximize production uptime and throughput. This is why industrial manufacturers repeatedly turn to Tregaskiss and its proven track record in providing resilient, easy to maintain, robotic MIG welding guns, consumables and peripherals.

Visit Tregaskiss.com to configure a robotic gun for your welding application today.
Or call 1-855-MIGWELD (644-9353) for more information.

Multiprocess

For more detailed information, visit
MillerWelds.com/multiprocess

Power Source Welding Performance		150 A	250 A	300 Amp		350 Amp			450 Amp			650 Amp
		Multimatic™ 200 (1-Phase) (pg 31)	Shopmate™ 300 DX (1-Phase) (pg 31)	Dimension™ 302 (pg 32)	XMT® 304 CC/CV (pg 34)	XMT® 350 VS (pg 34)	XMT® 350 CC/CV (pg 34)	XMT® 350 MPa (pg 34)	Dimension™ 452 (pg 32)	XMT® 450 CC/CV (pg 34)	XMT® 450 MPa (pg 34)	Dimension™ 650 (pg 33)
Material	Mild Steel	●	●	●	●	●	●	●	●	●	●	●
	Stainless Steel	●	●	◉	●	●	●	●	◉	●	●	●
	Aluminum*	◉	◉	◉	◉	◉	◉	●	◉	◉	●	◉
Material Thickness	Gauge (.020–.125 in.)	●	●	●	●	●	●	●	◉	●	●	●
	Sheet (.125–.375 in.)	●	●	●	●	●	●	●	●	●	●	●
	Plate (.375–1 in.)								●	●	●	●
	Plate (1+ in.)								◉	◉	◉	●
Wire Size	.023 in.	●	●	◉	◉	◉	◉	◉	◉	◉	◉	◉
	.030 in.	●	●	●	●	●	●	●	◉	●	●	●
	.035 in.	●	●	●	●	●	●	●	●	●	●	●
	.045 in.	◉	◉	●	●	●	●	●	●	●	●	●
	.052 in.			●	●	●	●	●	●	●	●	●
	1/16 in.			◉	◉	●	●	●	●	●	●	●
	5/64 in.					●	●	●	●	●	●	●
	3/32 in.								◉	◉	◉	●
Process	Short Circuit	★★★★	★★★	★★	★★★	★★★	★★★★	★★★★	★★	★★★★	★★★★	★★★★
	Pulsed Spray							★★★★			★★★★	
	Stick	★★	★★★	★★	★★★★	★★★★	★★★★	★★★★	★★	★★★★	★★★★	★★★★
	TIG	★★★	★★★	★	★★★	★★★	★★★	★★★	★	★★★	★★★	★★★
	CAC-A		3/16 in.	1/4 in.	1/4 in.	1/4 in.	1/4 in.	1/4 in.	5/16 in.	5/16 in.	5/16 in.	3/8 in.

Icon Key

Capability: ● Designed for ◉ Capable of

Process Quality: ★ Good ★★ Better ★★★ Best ★★★★ Optimized

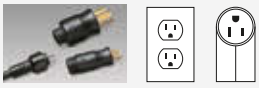
*XR push-pull system recommended for best results.

Multimatic™ 200

See literature no. DC/12.57

WIRELESS REMOTE COMPATIBLE

See page 113



Multi-voltage plug (MVP™) allows connection to common 120- and 240-volt power receptacles without the use of any tools — simply choose the plug that fits the receptacle and connect to the power cord.

Recommended aluminum solution
Spoolmate 100 (#300 371) or 150 (#301 272).

Welding Capability

Max. 3/8 in. (9.5 mm)	Max. 1/4 in. (6.4 mm)	Max. 3/16 in. (4.8 mm)
MIG Mild Steel	MIG Aluminum	TIG Mild Steel
Min. 24 ga. (0.6 mm)	Min. 18 ga. (1.2 mm)	Min. 0.020 in. (0.5 mm)

Aluminum welding uses optional Spoolmate 100 and 4000 series aluminum wire or Spoolmate 150 (effective with Multimatic serial number MF364047N) and either 4000 or 5000 series aluminum wire. TIG welding uses optional TIG contractor kit.

The only all-in-one, portable, multiprocess power source from Miller is our most versatile machine to date. Weighing only 29 pounds (13.2 kg) and running on either 120 or 230 volts, the Multimatic 200 can go anywhere you need to MIG, TIG or stick weld.

Auto-Set™ Elite can be used on multiple materials and multiple processes with the ability to fine-tune your settings. Simple to set up and use!

Excellent arc characteristics! Unit offers positive arc starts and an extremely stable arc with minimal spatter on both mixed gases and straight CO_2.

Impact-resistant case provides strength and durability while protecting the internal components and welding wire.

Light industrial ● CC/CV DC 1 Phase

Processes
- MIG (GMAW) • Flux-cored (FCAW)
- DC stick (SMAW) • DC TIG (DC GTAW)

Comes complete with
- 10 ft. (3 m) Bernard™ Q150 MIG gun
- 13 ft. (4 m) cable with electrode holder and 25 mm Dinse-style connector
- 10 ft. (3 m) work cable with clamp and 25 mm Dinse-style connector
- Power cord with MVP plugs for 120 V and 240 V
- Quick Select™ drive roll for .024 in. (0.6 mm) or .030/.035 in. (0.8/0.9 mm) solid wire, and .030/.035 in. (0.8/0.9 mm) flux-cored wire
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix, extra contact tips, information/settings chart and material thickness gauge (#229 895)

Most popular accessories
- Spoolmate™ Spool Guns (pg 18)
- TIG Contractor Kit #301 287 (pg 112)
- 14-Pin to 6-Pin Adapter Cord #300 507 (pg 112)
- RCCS-6M Remote Fingertip Control #195 184 (pg 112)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number
(#907 518) 120/230 V
(#951 649) 120/230 V with TIG contractor kit (see page 112 for kit contents)

Welding Mode/Process	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz 120 V	230 V	KVA	KW	Wire Feed Speed	Max. Open-Circuit Voltage	Dimensions	Net Weight
CV: MIG/ flux-cored	120 V	30–140	90 A at 18.5 V, 60% duty cycle	18	–	2.2	2	70–425 ipm (1.8–10.8 m/min.)	90 VDC	H: 14.5 in. (368 mm) W: 9.75 in. (248 mm) D: 17 in. (432 mm)	29 lb. (13.2 kg)
			110 A at 19.5 V, 20% duty cycle	20	–	2.7	2.6				
	230 V	30–200	150 A at 21.5 V, 20% duty cycle	–	17.5	4.0	3.8				
CC: TIG	120 V	5–150	150 A at 16 V, 30% duty cycle	27	–	3.3	3.2	–	90 VDC (22–25 VDC, sense voltage for stick and Lift-Arc™ TIG)		
	230 V	5–150	150 A at 16 V, 30% duty cycle	–	13.8	3.2	3.0				
CC: Stick	120 V	20–150	100 A at 24 V, 35% duty cycle	24	–	2.9	2.8				
	230 V	20–150	150 A at 26 V, 30% duty cycle	–	20.8	4.8	4.5				

Shopmate™ 300 DX

See literature no. DC/12.7

An economical single-phase DC multiprocess power source that provides versatility and outstanding arc performance in CV mode (MIG) and CC mode (stick and TIG).

Shopmate 300 DX with MIG package shown.

Process selector switch is an "operator-friendly" single process switch that eliminates the confusion of several switch combinations.

Digital meters for presetting or monitoring voltage and amperage.

Built-in 10-pin connector for direct hookup of Spoolmatic® spool guns and **built-in 14-pin connector** for direct hookup of 14-pin, Miller® wire feeders and accessories.

Fan-On-Demand™ cooling system operates only when needed.

Line voltage compensation keeps welding parameters constant.

Arc control adjusts inductance in MIG mode and DIG in stick mode to optimize weld performance.

Lift-Arc™ start provides DC TIG arc starting without the use of high frequency. Starts the arc without contaminating the weld with tungsten.

Light industrial ● CC/CV DC 1 Phase

Processes
- MIG (GMAW) • Flux-cored (FCAW)
- DC stick (SMAW) • DC TIG (DC GTAW)
- Air carbon arc cutting and gouging (CAC-A) (3/16 in. carbons)

MIG package comes complete with
- 22A wire feeder with Bernard™ BTB Gun 300 A
- Shopmate 300 MIG kit consisting of flow gauge regulator and 10 ft. (3 m) gas hose for argon or AR/CO_2 mix, 10 ft. (3 m) 1/0 interconnecting cable, 15 ft. (4.6 m) 1/0 work cable with clamp and consumable storage box.

Most popular accessories
- Shopmate Running Gear/Dual Cylinder Rack #300 145 (pg 107)
- Shopmate 300 MIG Kit #300 150 (pg 109)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number
(#907 315) 200(208)/230 V
(#907 316) 230/460/575 V
(#951 076) 200(208)/230 V w/MIG package
(#951 077) 230/460/575 V w/MIG package

Amperage Range	Voltage Range	Rated Output	Amps Input at Rated Load Output, 60 Hz 208 V	230 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions (Includes lift eye)	Net Weight
5–400	10–35	250 A at 30 VDC, 60% duty cycle	66	57	29	23	13	11.2	80 VDC	H: 24.5 in. (622 mm) W: 19 in. (483 mm) D: 25.5 in. (648 mm)	177 lb. (80.3 kg)

Dimension™ 302 and 452

See literature no. DC/19.2

Multiprocess performance in a reliable package. Designed for heavy-industrial applications, with 100 percent duty cycle for extended arc-on time.

Dimension 452 Stationary package (#951 273) shown.

Built-in arc control for stick welding allows operators more flexibility when welding in tight areas where sticking electrodes is a problem.

Line voltage compensation ensures consistent weld performance even when primary power varies.

Fan-On-Demand™ cooling system operates only when needed. Reduces contaminants drawn into the machine and excess noise in work areas.

Digital meters are easy to read and display preset and actual voltage and amperage.

115-volt power for tools and coolant systems.

EQUIP to WELD

*Build your own system at **MillerWelds.com/equiptoweld** or see packages below.*

Heavy industrial ● CC/CV DC 3 Phase

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)
- Stick (SMAW) ▪ TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (carbons – 302: 1/4 in., 452: 5/16 in.)

Stationary package includes
- Power source
- S-74D feeder with Bernard™ BTB Gun 400 A and .035/.045 in. drive rolls
- Industrial MIG 4/0 kit consisting of flowmeter regulator with 10 ft. (3 m) gas hose, 10 ft. (3 m) 4/0 feeder weld cable with lugs, and 15 ft. (4.6 m) work cable with 600-amp C-clamp.

MIGRunner™ package includes above plus
- Factory-installed running gear with cylinder rack

Most popular accessories
- SuitCase® X-TREME™ Feeders (pg 42)
- 70 Series Feeders (pg 44)
- Standard Running Gear/Cylinder Rack #042 886/#042 887 (pg 106)
- Industrial MIG 4/0 Kit (with lug connectors) #300 390 (pg 109)
- Extension Cables (pg 114)

When purchasing components separately, visit MillerWelds.com/equiptoweld or your distributor for other Miller® options and accessories.

Note: Dimension 652 still available for a limited time; see page 33 for Dimension 650.

Model	Stock Number	Amperage/ Voltage Ranges	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Machine Only Dimensions *(Includes lift eye and strain relief)*	Machine Only Net Weight
Dimension 302	**(#903 216)** 230/460/575 V, Machine only **(#951 272)** 230/460/575 V, Stationary pkg **(#951 276)** 230/460/575 V, MIGRunner pkg	CC mode: 15–375 A	300 A at 32 VDC, 100% duty cycle	57.5	50	25	20	20	12.9	60 VDC	H: 30 in. (762 mm) W: 23 in. (585 mm) D: 30.5 in. (775 mm)	361 lb. (164 kg)
		CV mode: 10–32 V		69	60	30	24	23.7	13.4	36 VDC		
Dimension 452	**(#903 254)** 200(208)/230/460 V, Machine only **(#903 255)** 230/460/575 V, Machine only **(#951 273)** 230/460/575 V, Stationary pkg	CC mode: 20–565 A	450 A at 38 VDC, 100% duty cycle	91	79	39	31	31.4	22	65 VDC	H: 30 in. (762 mm) W: 23 in. (585 mm) D: 38 in. (966 mm)	424 lb. (192 kg)
		CV mode: 10–38 V		104	90	45	36	35.3	22.3	43 VDC		

Miller recommends

HOBART FILLER METALS

Innovation
Focused on optimizing quality, ease-of-use and cost

Collaboration
Partnering to meet customer needs

Trusted source
Deep product and application expertise to deliver success

Visit **HobartBrothers.com** for more information.

More than just filler metal… *SOLUTIONS* for your business.

Dimension™ 650

See literature no. DC/19.3

Developed for harsh environmental conditions and output requirements that range from power-intensive to precise.

Build your own system at ***MillerWelds.com/equiptoweld*** *or see packages below.*

All aluminum construction helps the machine resist corrosion for long life.

Exclusive protection input inductor protects machine's performance and reliability from "dirty" input power.

Wind Tunnel Technology™ protects internal components, greatly improving reliability.

Fan-On-Demand™ reduces power consumption and improves reliability.

BUILT TO LAST

High-quality performance in all welding processes, from thick to thin metals.

Arc control available in the stick and wire modes for easier fine tuning of tough-to-weld materials and out-of-position applications.

POWER FOR THICK METALS
PRECISION FOR THIN METALS

Reduced size and weight results in an easier-to-handle package that exceeds the welding performance of larger, heavier machines. Dimension 650 is 3.5 times lighter than the Dimension 652 and also uses 40 percent less floor space.

48% SMALLER
OVER 200 lb. LIGHTER

High electrical efficiency and excellent power factor mean that you can get more welding done using less power. Dimension 650 uses 32 percent fewer amps than the Dimension 652.

93% EFFICIENT

Dimension 650 ArcReach™

Recommended Option!

Remote control of the power source without a cord. An ArcReach system allows you to change weld settings from your SuitCase wire feeder or Stick/TIG Remote, saving a trip to the power supply. No extra control cable to purchase, maintain, string or unstring – saving time and money. See page 43 for ArcReach wire feeders.

Heavy industrial CC CV DC 3 Phase

Processes

- MIG (GMAW) • Flux-cored (FCAW)
- Stick (SMAW) • TIG (GTAW)
- Submerged arc (SAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 3/8 in. carbons)

Stationary package includes

- Power source
- S-74 MPa Plus feeder with Bernard™ BTB Gun 400 A and .035/.045 in. drive rolls
- Industrial MIG 4/0 kit consisting of flowmeter regulator with 10 ft. (3 m) gas hose, 10 ft. (3 m) 4/0 feeder weld cable with lugs, and 15 ft. (4.6 m) work cable with 600-amp C-clamp.

MIGRunner™ package includes above plus

- Running gear cylinder rack

Most popular accessories

4-pack rack shown.

- **Dimension 650 Rack**
  #907 687 2-pack rack
  #907 688 4-pack rack
  Rack comes assembled with two or four Dimension 650 power sources fused for 460 V.
- **Dimension 650 ArcReach Rack**
  #907 702 2-pack rack
  #907 701 4-pack rack
  Rack comes assembled with two or four Dimension 650 ArcReach power sources fused for 460 V.
- SuitCase® X-TREME™ Feeders (pg 42)
- 70 Series Feeders (pg 44)
- Bernard™ MIG Guns (pg 47)
- Running Gear Cylinder Rack #300 408 (pg 107)
- Dimension 650 Running Gear #301 307 (pg 107)
- Industrial MIG 4/0 Kit (with lug connectors) #300 390 (pg 109)
- Extension Cables (pg 114)
  #242 208 025 25 ft. (7.6 m)
  #242 208 050 50 ft. (15 m)
  #242 208 080 80 ft. (24.4 m)

When purchasing components separately, visit MillerWelds.com/equiptoweld or your distributor for other Miller® options and accessories.

Model/Stock Number	Amperage/ Voltage Ranges	Rated Output	Amps Input at Rated Output, 50/60 Hz 380 V	460 V	KVA	KW	Max. Open-Circuit Voltage	Machine Only Dimensions (Includes lift eye)	Machine Only Net Weight
Dimension 650 **(#907 617)** 380/460 V Machine only **(#951 638)** 380/460 V Stationary package **(#951 637)** 380/460 V MIGRunner package **Dimension 650 ArcReach** **(#907 617 001)** 380/460 V Machine only	CC mode: 10–815 A CV mode: 10–44 V SAW mode: 10–65 V	650 A at 44 VDC, 100% duty cycle	53.2	42.8	34	30.7	87 VDC	H: 28.187 in. (716 mm) W: 16.687 in. (424 mm) D: 31.625 in. (803 mm)	158 lb. (71.7 kg)

Multiprocess

XMT® Series

Portability and excellent multiprocess arc performance make the XMT family the most popular in the industry. With many models to choose from the XMT family has the right solution for your business.

XMT 304 *XMT 350* *XMT 450*

Input power choices

Auto-Link® (304 model) automatically links the power source to primary voltage being applied (230/460 V, single- or three-phase).

AUTO-LINE™ Power Management Technology (350 models) allows for any input voltage hookup (208–575 V, single- or three-phase) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable input power.

Standard hookup (450 models). Available as 230/460 V manual link or 575 V models, three-phase only.

Advanced features for the professional welder

Adaptive Hot Start™ makes starting stick electrodes easy without creating an inclusion.

Infinite arc control available in the stick and wire modes for easier fine tuning of tough-to-weld materials and out-of-position applications.

Lift-Arc™ provides arc starting that minimizes contamination of the electrode and without the use of high frequency.

Insight Core™ **Welding Intelligence™ system.** XMT 14-pin models are Insight Core capable to monitor weld voltage, amperage, and arc-time and percentage.

Reliability

Wind Tunnel Technology.™ Air flow that protects internal components, greatly improving reliability.

Fan-On-Demand™ cooling system operates only when needed, reducing noise, energy use and amount of contaminants pulled through machine.

Welder friendly control panel

Process selector switch reduces the number of control setup combinations without reducing any features.

Ultra-tough, polycarbonate-blended cover protects front controls from damage.

Large, dual digital meters are easy to view and presettable to ease setting weld output.

Output connector choices

Dinse- or Tweco®-style weld disconnects (304/350 models) provide high-quality weld cable connections.

Note: Two Dinse connectors are supplied with Dinse machines. Tweco connectors must be ordered separately.

Weld studs (450 models).

14-pin receptacle provides a quick, direct connection to Miller® wire feeders. Capable of remote voltage control.

Choose the Right XMT

	300 Amp	350 Amp			450 Amp	
	XMT 304 CC/CV	XMT 350 VS	XMT 350 CC/CV	XMT 350 MPa	XMT 450 CC/CV	XMT 450 MPa
Input Power	3- or 1-phase power	3- or 1-phase power			3-phase	
Primary Operating Range	Auto-Link (230/460 V)	UPGRADE Auto-Line (208–575 V)			Manual link (230/460 V) or 575 V	
Weld Output	300 A at 32 VDC (3-phase input power at 60% duty cycle)	UPGRADE 350 A at 34 VDC (3-phase input power at 60% duty cycle)			UPGRADE 450 A at 38 VDC (3-phase input power at 100% duty cycle)	
Carbon Arc Gouging	Rated: 1/4 in. (6.4 mm)	UPGRADE Rated: 1/4 in. (6.4 mm)			UPGRADE Rated: 5/16 in. (7.9 mm)	
Net Weight	79.5 lb. (36.1 kg)	80 lb. (36.3 kg)			122 lb. (55.3 kg)	
Output Connector	Dinse	Tweco	Dinse or Tweco	Dinse or Tweco	1/2 in. stud	
Pulsed MIG	–	–	–	UPGRADE Yes	–	UPGRADE Yes
14-pin Compliant	Yes	–	Yes	Yes	Yes	Yes
Insight Core Capable (requires Insight Core 14-pin module)	Yes	–	Yes (pg 24)	Yes (pg 24)	Yes (pg 24)	Yes (pg 24)
ArcReach™	–	Factory option (pg 36)	Factory option (pg 36)	–	Factory option (pg 36)	–

XMT® 304 CC/CV

See literature no. DC/18.8

Cost-effective multiprocess machine featuring Auto-Link®.

XMT® 350 VS

See literature no. DC/18.93

For applications in which 14-pin receptacle is not needed for remote control or 14-pin feeders.

Most Popular! XMT® 350 CC/CV and 450 CC/CV

See literature no. DC/18.93 (350) and DC/18.94 (450)

Flexibility and simplicity make this the most popular model. It has the core multiprocess capabilities along with the flexibility of a 14-pin for spool guns, feeders, and remote controls.

Stronger weld output for increased capabilities. XMT 350 provides 24 percent more output than the 304 model for larger wires and stick electrodes. XMT 450 provides 43 percent more output for carbon arc gouging.

XMT® 350 MPa and 450 MPa

See literature no. DC/18.93 (350) and DC/18.94 (450)

Built-in pulse programs for manufacturing and fabrication applications that have benefits for standard steels, high-strength steels and aluminum.

Pulse programs provide reduced heat affected zone, weld in all positions, great for thick-to-thin metal, good gap filling ability and faster travel speeds and deposition.

SharpArc® controls the arc in pulsed MIG mode and gives total control over the arc cone shape, puddle fluidity and bead profile.

Additional features when using a 70 Series MPa Plus feeder or XR-AlumaFeed® feeder.

Synergic pulsed MIG. As you increase/decrease the wire feed speed, the pulse parameters increase/decrease, matching the right amount of power output to match the wire speed, eliminating the need to make additional adjustments.

Profile Pulse™ provides TIG appearance with MIG simplicity and productivity. Achieve "stacked dimes" without gun manipulation. Profile Pulse frequency can be changed to increase or decrease the spacing between the ripple pattern to achieve the desired weld appearance.

Added capabilities with Insight Core™. When using an MPa Plus feeder, wire deposition is added to the Insight Core capabilities.

**Feeders include gun and drive rolls. MIGRunners add 2/0 weld cable and 2/0 work cable with clamp, flowmeter regulator with gas hose and MIGRunner cart.*
***Duty cycle rating below achieved with 6-gauge input power cord (8-gauge cord supplied with unit).*

Heavy industrial

CC CV DC 3 Phase 1 Phase *XMT 450 is 3-phase only.*

Processes

- MIG (GMAW) • Pulsed MIG (GMAW-P)*
- Stick (SMAW) • TIG (GTAW)
- Flux-cored (FCAW)
- Air carbon arc cutting and gouging (CAC-A) (carbons – 304: 1/4 in., 350: 1/4 in., 450: 5/16 in.)

**Only XMT MPa models.*

Most popular accessories for non-VS models

- XR-AlumaFeed® (pg 17)
- Spoolmatic®/ WC-24 (pg 19)
- XR™ Controls (pg 21)
- 20 and 70 Series Feeders (pg 44)

Most popular accessories for all models

- **XMT Rack** Available in four- or six-pack models for XMT 304 and 350, or four-pack models for XMT 450. See literature no. DC/18.81 for more information and stock numbers.

- SuitCase® X-TREME™ Feeders (pg 42)
- Cylinder Cart #042 537 (pg 106)
- MIGRunner™ Cart #195 445 (pg 107)
- Running Gear Cylinder Rack #300 408 (pg 107)
- Coolmate™ Coolant System (pg 107)
- Industrial MIG 4/0 Kits (pg 109)
  #300 405 XMT 304/350
  #300 390 XMT 450
- Protective Cover (XMT 304/350 only) #195 478 (pg 112)
- Gas Valve Kit
  #195 286 XMT 350
  #300 928 XMT 450

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

	Power Source Model/Stock Number	Input Power	Amperage/ Voltage Ranges	Rated Output	Amps Input at Rated Load Output, 60 Hz 208 V	230 V	400 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
300 A	**XMT 304 CC/CV** (Dinse) **(#903 471)** 208-230/460 V **(#951 343)** 208-230/460 V MIGRunner w/22A*	3-phase	5-400 A 10-35 V	300 A at 32 VDC, 60% duty cycle	33.7	30.5	–	18.9	–	12.2	11.6	90 VDC	H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)	79.5 lb. (36.1 kg)
		1-phase		225 A at 29 VDC, 60% duty cycle	52.4	47.4	–	24.5	–	11.3	7.6			
350 A	**XMT 350 VS (no remote control)** (Tweco®) **(#907 224)** 208-575 V **XMT 350 CC/CV** (Dinse) **(#907 161)** 208-575 V **(#907 161 011)** 208-575 V w/auxiliary power **(#951 549)** 208-575 V w/SuitCase X-TREME 12VS* **(#951 327)** 208-575 V MIGRunner w/22A* **(#951 314)** 208-575 V MIGRunner w/S-74D* **XMT 350 MPa** (Dinse except where noted) **(#907 366)** 208-575 V **(#907 366 011)** 208-575 V w/auxiliary power **(#907 366 014)** 208-575 V w/Tweco®	3-phase	5-425 A 10-38 V	350 A at 34 VDC, 60% duty cycle	40.4	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC	H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)	80 lb. (36.3 kg)
		1-phase	5-425 A 10-38 V	300 A at 32 VDC, 60% duty cycle**	60.8	54.6	29.7	24.5	19.9	11.7	11.2			
450 A	**XMT 450 CC/CV** (1/2 in. stud) **(#907 481)** 230/460 V **(#907 482)** 575 V	3-phase	15-600 A 10-38 V	450 A at 38 VDC, 100% duty cycle	–	51	–	27.6	24.4	22	18.9	90 VDC	H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)	122 lb. (55.3 kg)
	XMT 450 MPa (1/2 in. stud) **(#907 479)** 230/460 V **(#907 479 001)** 230/460 V w/auxiliary power **(#907 480)** 575 V **(#907 480 001)** 575 V w/auxiliary power				–	51	–	27.6	23.6	21.6	18.3			
					(KVA is 23.5 on 575 V)									

XMT® 350 and 450 ArcReach™ Systems

See literature no. DC/18.93 (350) and DC/18.94 (450)

Recomended Option!

Remote control of the power source without a cord. An ArcReach system allows you to change weld settings from your SuitCase wire feeder or Stick/TIG Remote, saving a trip to the power supply. No extra control cable to purchase, maintain, string or unstring – saving time and money. See page 43 for ArcReach wire feeders.

*XMT 350 CC/CV ArcReach shown with SuitCase X-TREME 12VS ArcReach feeder (sold separately). Feeders **include** Bernard S-Gun **or** BTB Gun 300 A with reversible dual size (.045 and 1/16 in.) VK drive rolls.*

More arc-on time and reduced exposure to workplace hazards for operators can be realized using ArcReach because less time is spent going back to the XMT to set process and arc voltage.

MORE WELDS IN LESS TIME

Auto-Process Select.™ System automatically changes to MIG/FCAW (with gas) if electrode positive polarity is detected or FCAW (no gas) if electrode negative polarity is detected, when ArcReach communication is established between the feeder and the XMT – reducing the need to access the power supply.

Automatic return to panel settings. System automatically returns to XMT setting when ArcReach communication is terminated. For example, if the XMT is set to gouging at 350 amps and an ArcReach feeder is connected, the XMT will go to a MIG/FCAW process. If the feeder is disconnected, the XMT will go back to its previous setting (gouging at 350 amps).

Auto-Bind™ automatically establishes exclusive communication between the power source and the wire feeder, using the existing weld cables upon system power up.

Operator can precisely set arc voltage at the feeder and monitor the actual arc voltage and current delivered to the weld using the digital meters on the feeder. This removes guesswork when it comes to adhering to weld procedures.

QA BETTER WELDS WITH LESS REWORK

Less operator fatigue by not needing to move or reposition both heavy secondary weld leads bundled with control cords on the jobsite. Control cables are not used.

Save time by no longer needing to troubleshoot welding system problems that result from damaged control cords.

Eliminate costly control cord repairs because control cords are not used.

FEWER CABLES TO MAINTAIN

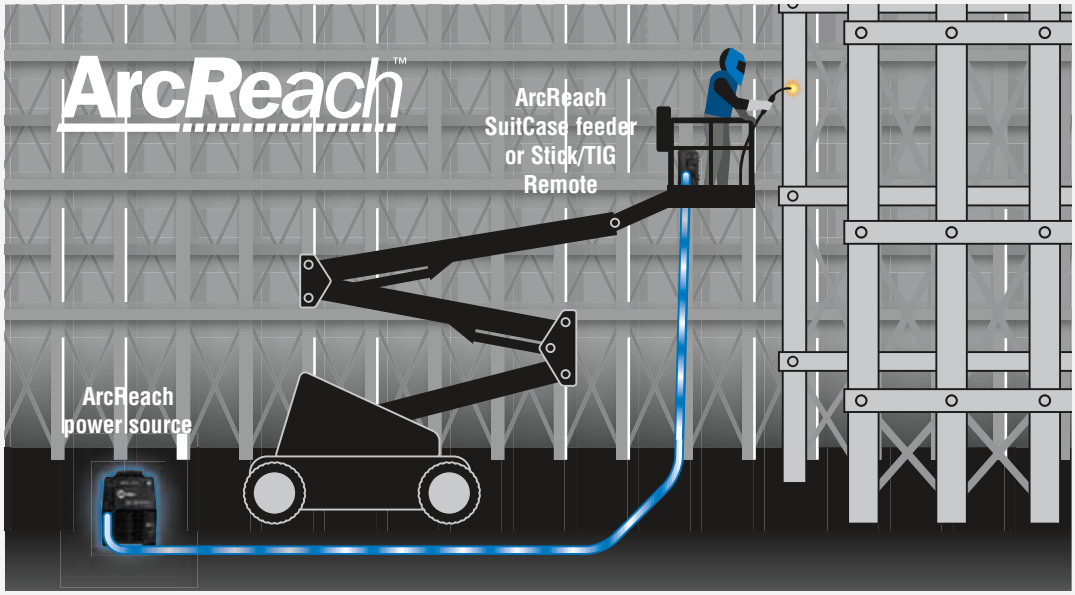
Remote override of XMT. When an ArcReach feeder is connected to an XMT the feeder has full control and the XMT controls are disabled. While under ArcReach control, process and voltage/amperage adjustments are locked out, preventing accidental changes by personnel other than the welding operator.

Remote in use indicator provides convenient feedback indicating an ArcReach wire feeder is controlling the power source.

LED process indicator. Front panel process selections are illuminated with an LED that identifies the active process. This enables the selected weld process to be seen at a distance from the power source. Includes new carbon arc gouging mode for enhanced arc stability and control, and two new stick modes (EXX10 and EXX18) designed to reduce spatter and enhance arc starts.

Fleet compatibility. ArcReach-equipped power sources and wire feeders work with non-ArcReach equipment; however the complete ArcReach benefit is only realized with the ArcReach system. This allows you to start investing in ArcReach one power source, one wire feeder at a time.

How ArcReach Works



ArcReach technology uses the existing weld cable to communicate welding control information between the feeder and power source. This technology eliminates the need for control cords, and their associated problems and costs.

ArcReach™ Accessories

For MIG or flux-cored welding — SuitCase X-TREME 8VS/12VS ArcReach feeders
- Remote voltage control
- Polarity indication
- Auto-Process Select™

For stick or TIG welding — ArcReach Stick/TIG Remote (available first quarter 2016)
- Remote amperage control
- Arc control for stick
- Polarity indication
- Auto-Process Select™

**Duty cycle rating below achieved with 6-gauge input power cord (8-gauge cord supplied with unit).*

Heavy industrial ● CC/CV DC 3 Phase 1 Phase *XMT 450 is 3-phase only.*

Processes
- MIG (GMAW) • Stick (SMAW)
- TIG (GTAW) • Flux-cored (FCAW)
- Air carbon arc cutting and gouging (CAC-A) (carbons – 304: 1/4 in., 350: 1/4 in., 450: 5/16 in.)

Most popular accessories for non-VS models
- XR-AlumaFeed® #300 509 (pg 17)
- Spoolmatic®/WC-24 (pg 19)
- XR™ Controls (pg 21)
- 20 and 70 Series Feeders (pg 44)

Most popular accessories for all models

- **XMT 350 CC/CV ArcReach Rack**
  #907 699 4-pack rack
  #907 698 6-pack rack
  Rack comes assembled with four or six XMT 350 CC/CV ArcReach power sources fused for 460/575 V. See literature no. DC/18.81 for more information.
- **XMT 450 CC/CV ArcReach Rack**
  #907 700 4-pack rack
  Rack comes assembled with four XMT 450 CC/CV ArcReach power sources fused for 460 V. See literature no. DC/18.81 for more information.
- ArcReach™ Stick/TIG Remote (see at left) #301 325
- SuitCase® X-TREME™ 8VS ArcReach™ Feeders (see at left and pg 42)
  #951 588 w/Bernard™ S-Gun™
  #951 584 w/Bernard BTB Gun 300 A
- SuitCase® X-TREME™ 12VS ArcReach™ Feeders (see at left and pg 42)
  #951 589 w/Bernard™ S-Gun™
  #951 581 w/Bernard BTB Gun 300 A

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

	Power Source Model/Stock Number	Input Power	Amperage/ Voltage Ranges	Rated Output	Amps Input at Rated Load Output, 60 Hz 208 V	230 V	400 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
350 A	**XMT 350 VS ArcReach** (Tweco®) **(#907 224 002)** 208–575 V	3-phase	5–425 A 10–38 V	350 A at 34 VDC, 60% duty cycle	40.4	36.1	20.6	17.8	14.1	14.2	13.6	75 VDC	H: 17 in. (432 mm) W: 12.5 in. (318 mm) D: 24 in. (610 mm)	80 lb. (36.3 kg)
	XMT 350 CC/CV ArcReach (Tweco®) **(#907 161 032)** 208–575 V **(#907 161 033)** 208–575 V w/auxiliary power	1-phase	5–425 A 10–38 V	300 A at 32 VDC, 60% duty cycle*	60.8	54.6	29.7	24.5	19.9	11.7	11.2			
450 A	**XMT 450 CC/CV ArcReach** (1/2 in. stud) **(#907 481 003)** 230/460 V **(#907 481 004)** 230/460 V w/auxiliary power **(#907 482 002)** 575 V	3-phase	15–600 A 10–38 V	450 A at 38 VDC, 100% duty cycle	–	51	–	27.6	24.4	22	18.9	90 VDC	H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)	122 lb. (55.3 kg)

PipeWorx 350 FieldPro™ System

See literature no. PWS/6.0

Simplicity-driven performance for your pipe construction site.

PipeWorx 350 FieldPro shown with optional FieldPro Remote, FieldPro Smart Feeder, and FieldPro Feeder.

WIRELESS REMOTE COMPATIBLE

See page 113

***FREE! PipeWorx 350 FieldPro system DVD** showcases the features and benefits of PipeWorx 350 FieldPro system and new pipe welding techniques. Visit **MillerWelds.com** to order your DVD today.*

Stick/TIG system includes
- PipeWorx 350 FieldPro power source (#907 533)
- FieldPro Remote with work sense lead and clamp (#300 934)

MIG/flux-cored system includes
- PipeWorx 350 FieldPro power source (#907 533)
- FieldPro Feeder with drive rolls, work sense lead and clamp (#301 228)
- 15 ft. (4.6 m) PipeWorx 300 MIG gun (#195 400)

RMD/pulse system includes
- PipeWorx 350 FieldPro power source (#907 533)
- FieldPro Smart Feeder with drive rolls (#300 935)
- 15 ft. (4.6 m) PipeWorx 300 MIG gun (#195 400)

Simplified cable management
- Save time by eliminating the need to trace cables back to change welding parameters and processes
- No control cables to string and manage on the jobsite

Complete control at the weld joint
- FieldPro remote reduces weld defects by automatically setting correct polarity for each welding process – without the need to manually swap cables
- Eliminates the need to "get by" with less than optimal settings without control cables, and allows for easy setup of a new weld process with the touch of a button
- Total remote control of welding processes and parameters improves safety by limiting jobsite movement and reducing slip, trip and fall hazards

Arc performance optimized for critical pipe welding
- Industry-leading arc performance like the PipeWorx 400 welding system, but in a field-ready package
- True multiprocess system provides conventional stick, TIG, flux-cored and MIG welding, as well as the advanced technologies of RMD® and pulsed MIG
- Smart feeder delivers excellent RMD and pulsed MIG welding 200 feet from the power source with no control cables. RMD and pulse processes help reduce weld failures and eliminate backing gas on some stainless and chrome-moly applications

New durability standard for field construction
- Designed and built to withstand the harshest field environments

PipeWorx 400 Welding System

See literature no. PWS/2.0

Optimized for pipe fabrication shops.

PipeWorx 400 welding system (#951 381) shown with accessory kit (#300 568). Filler metal and shielding gas sold separately.

WIRELESS REMOTE COMPATIBLE

See page 113

***FREE! PipeWorx 400 welding system CD** showcases the features and benefits of PipeWorx welding system and new pipe welding techniques. Visit **MillerWelds.com** to order your CD today.*

PipeWorx welding system comes complete with
- PipeWorx 400 power source with cable hangers (#907 382) or (#907 384)
- Dual feeder with drive rolls (#300 366)
- Two 15 ft. (4.6 m) PipeWorx 300 guns (#195 400)
- Running gear with gas cylinder rack and handles (#300 368)
- Cable kit with 25 ft. (7.6 m) work sense lead (#300 367)

Simple process setup
- The front panel was designed by welders for welders
- Requires just a few basic steps to set up a new weld process, resulting in less training time and minimizing errors from incorrect setups
- Memory feature stores four programs for each selection: stick, DC TIG, and MIG (left and right side of feeder) Eliminates the need to remember parameters

True multiprocess machine
- Weld processes are optimized to deliver superior arc performance and stability specifically for root, fill, and cap passes on pipe
- RMD® and pulsed MIG increase quality and productivity

Quick process changeover
- Simply push a process selection button to choose a welding process
- Eliminates set-up time and reduces the risk of weld reworks due to incorrect cable connections
- PipeWorx "Quick Select" technology automatically selects the welding process, the correct polarity, cable outputs, gas solenoid, and user-programmed welding parameters

Single-system design
- One machine designed to perform all of your pipe welding needs
- Simplified and optimized specifically for pipe welding

Advanced Technologies of PipeWorx Systems

RMD® (regulated metal deposition)

RMD carbon steel

- Higher quality root pass
- Calm stable arc
- Less spatter
- More tolerant of hi-lo conditions
- Reduced training requirements
- Less chance of cold lap or lack of fusion reducing rework
- Can eliminate the need for a hot pass
- Can eliminate backing/purge gas in some stainless applications

PipeWorx Memory Card, Accu-Power #300 667
Displays instantaneous power during welding to meet the new ASME requirement for calculating heat input on complex waveform processes (RMD and pulsed MIG).

Pulsed MIG

Pulsed MIG stainless

- Less heat input than traditional spray pulse transfer
- Shorter arc length
- Narrower arc cone
- Improved fusion and fill at the toes of the weld resulting in:
  - Faster travel speeds
  - Higher deposition rates
- Less training time required because pulsed MIG:
  - Virtually eliminates arc wander
  - Is easier to control the puddle
  - Compensates for tip to work variations automatically
- When used with RMD, it is possible to use one wire and one gas for all passes

PipeWorx 350 FieldPro Racks

All the benefits of the individual PipeWorx 350 FieldPro in an easy to transport package for multiple arcs in the field.

Flexible solution. The flexibility of the PipeWorx 350 FieldPro makes it ideal for multiple system racks. Every system in a rack can be used for different tasks on-site, increasing fleet utilization and making the best use of equipment budgets.

Easy installation. The power distribution system on the rack allows the entire rack to be wired into a single power drop, isolating high-voltage power in the field.

Model/Stock Number	Rack Capacity	Input Power to Rack	Dimensions	Net Weight
4-Pack Rack (#907 588)	4 units	230–575 V, three-phase, 50/60 Hz. *(Fuses included for 460 or 575 V operation. Only empty racks require ordering appropriate fuse kit.)*	H: 59 in. (1,500 mm) W: 43 in. (1,092 mm) D: 34.375 in. (873 mm)	679 lb. (308 kg)
6-Pack Rack (#907 589)	6 units			879 lb. (399 kg)
Empty Rack (#195 466)	6 units			279 lb. (127 kg)

**Welding with the smart feeder requires the PipeWorx 350 FieldPro to be hooked up to three-phase power. **Dimensions and weight are for power source only.*

Heavy industrial ●
CC CV DC 3 Phase 1 Phase *PipeWorx 400 is 3-phase only.*

Processes
- Stick (SMAW) ▪ DC TIG (GTAW)
- MIG (GMAW) ▪ Flux-cored (FCAW)
- RMD ▪ Pulsed MIG (GMAW-P)
- Air carbon arc cutting and gouging (CAC-A)

Most popular accessories for both PipeWorx Systems
- Bernard™ PipeWorx™ Guns
  #195 399 15 ft. (4.6 m) 250-15
  #195 400 15 ft. (4.6 m) 300-15

Most popular accessories for PipeWorx 400 Welding System

- ***NEW!*** **PipeWorx 400 Insight Module** #301 304
- PipeWorx Accessories Kit for Dual Feeder #300 568
  Includes 25 ft. work cable, EG500 work clamp, two flowmeter regulators and two 4 ft. gas hoses.
- Composite Cable Kit
  #300 454 25 ft. (7.6 m)
  #300 456 50 ft. (15.2 m)
- PipeWorx Cooler #300 370
- Foot Control Bracket #300 676
- DSS-9 Dual Schedule Switch #071 833
- RFCS-14 HD #194 744 (pg 112)
- RPBS-14 #300 666 (pg 112)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

PipeWorx 350 FieldPro System

Model/Stock Number	Input Power	Amperage/Voltage Ranges	Rated Output at 60% Duty Cycle	Amps Input at Rated Output, 60 Hz 230 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions**	Net Weight**
PipeWorx 350 FieldPro System **(#951 547)** Stick/TIG **(#951 572)** MIG/flux-cored **(#951 573)** RMD/pulse **PipeWorx 350 FieldPro Power Source only** **(#907 533)** 230–575 V	Three-phase	CC mode: 10–350 A CV mode: 10–44 V	350 A at 34 VDC	36.1	17.8	14.1	15.0	14.4	75 VDC	H: 17 in. (432 mm) W: 12 in. (305 mm) D: 22 in. (559 mm)	95 lb. (43.1 kg)
	Single-phase*	CC mode: 10–350 A CV mode: 10–44 V	300 A at 32 VDC	54.6	25.4	19.9	11.7	11.2			

Model/Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Type and Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
FieldPro Feeder only **(#301 228)** For use with CC or CV, DC power sources	Operates on open-circuit voltage and arc voltage: 14–110 VDC	425 A at 60% duty cycle	50–800 ipm (1.3–20.3 m/min.) dependent on arc voltage	**Solid wire** .023–5/64 in. (0.6–2.0 mm) **Flux-cored** .030–5/64 in. (0.8–2.0 mm)	12 in. (305 mm), 45 lb. (20 kg)	H: 15.5 in. (394 mm) W: 9 in. (229 mm) D: 21 in. (533 mm)	35 lb. (15.9 kg)
FieldPro Smart Feeder only **(#300 935)** For use with PipeWorx 350 FieldPro or Big Blue 800 Duo Pro SF only	Operates on open-circuit voltage and arc voltage: 14–110 VDC*	275 A at 60% duty cycle	50–500 ipm (1.3–12.7 m/min.) dependent on arc voltage	.035–.045 in. (0.9–1.1 mm)	12 in. (305 mm), 33 lb. (15 kg)	H: 13 in. (330 mm) W: 18 in. (457 mm) D: 21.5 in. (546 mm)	50 lb. (23 kg)

PipeWorx 400 Welding System

Model/Stock Number	Welding Mode/ Process	Amperage/ Voltage Ranges	Rated Output at 100% Duty Cycle	Amps Input at Rated Output, 60 Hz, 3-Phase 230 V	460 V	575 V	KVA 230 V	460 V	575 V	KW 230 V	460 V	575 V	Max. Open-Circuit Voltage	Dimensions**	Net Weight**
PipeWorx 400 Welding System **(#951 381)** 230/460 V **(#951 382)** 575 V **PipeWorx 400 Power Source only** **(#907 382)** 230/460 V **(#907 384)** 575 V	CC: Stick	40–400 A	400 A at 36 VDC	43.9	26.6	22.4	17.5	21.2	22.3	16.1	16.3	16.4	90 VDC	H: 28.5 in. (724 mm) W: 19.5 in. (495 mm) D: 31.75 in. (806 mm)	225 lb. (102 kg)
	CC/DC: TIG	10–350 A	350 A at 24 VDC	29.3	18.2	13.5	11.8	14.5	13.4	10.7	10.6	10			
	CV: MIG/flux-cored	10–44 V	400 A at 34 VDC	42.9	24	20.5	17.3	19.2	20.5	16	15.8	16.2			

Model/Stock Number	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
PipeWorx Feeder only **(#300 365)** Single-wire model **(#300 366)** Dual-wire model	24 VAC, 11 A	100 V, 750 A at 100% duty cycle	50–780 ipm (1.3–19.8 m/min.)	.035–.062 in. (0.9–1.6 mm)	60 lb. (27 kg)	H: 14 in. (356 mm) W: 19 in. (483 mm) D: 29 in. (737 mm)	**Single** 65 lb. (29.5 kg) **Dual** 90 lb. (41 kg)

Miller recommends BERNARD™

Professional Welding Made Friendly

Bernard appreciates that no two welders and no two welding applications are exactly alike. That's why we make it easy to get a made-to-order, hand-held MIG gun that meets the needs of your welding application and your highest expectations.

Drop by online anytime to build your industrial-duty MIG gun with our user-friendly configurator. Or give us a call and we'll lend a hand in helping you select the ideal mix of MIG gun options and consumables to maximize the success of your welding operation.

Visit **BernardWelds.com**
or your local distributor,
or call **1-855-MIGWELD (644-9353)**
to learn more.

Configure your MIG gun today at BernardWelds.com/ConfigureMyGun

Miller recommends

It's the tie that binds

HOBART® FILLER METALS

SCIENCE + PEOPLE

Finding the right filler metal solution for your welding needs is critical in an industry that is about getting the job done right. Filler metals are more than just a component of welding—they are ***the tie that binds science and people.*** The right solutions. Solutions to make our world more secure. More dynamic. More of what *you* need.

Every day, every project, every weld is another opportunity for Hobart to earn and secure your trust by helping you find the right filler metal solution.

That kind of help and finding your welding solutions is our passion.

Visit **HobartBrothers.com** for more information.

Find *Your* Solution. Today.

MORE on the WEB

For more detailed information, visit
MillerWelds.com/wirefeeders

Wire Feeders

Also see Advanced/Automated MIG and Multiprocess sections for wire feeding options.

Product Guide

	Page	Class	MIG	Pulsed MIG*	Flux-cored**	Portable	Power Source Required	Wire Types: Hard	Wire Types: Flux-cored Dual-shld	Wire Types: Flux-cored Self-shld	Wire Types: Alum.	Wire Diameters	Special Features	Typical Applications	
SuitCase® X-TREME™ 8VS/12VS	42	●	●	◉	●	●	CC/CV	◉	●	● CV**	◉	.023–5/64 in. (0.6–2.0 mm)	8 in. (8VS) or 12 in. (12VS) diameter spool capacity, lightweight, powered by arc voltage	Construction, site fabrication, field maintenance	Portable
SuitCase® X-TREME™ 8VS/12VS ArcReach	42	●	●	◉	●	●	CC/CV	◉	●	● CV**	◉	.023–5/64 in. (0.6–2.0 mm)	8 in. (8VS) or 12 in. (12VS) diameter spool capacity, powered by arc voltage, remote voltage control without a control cord	Construction, site fabrication field maintenance	
SuitCase® 12RC	42	●	●	◉	●	●	CV	●	●	●	◉	.023–5/64 in. (0.6–2.0 mm)	Standard remote voltage control, 12 in. diameter spool capacity, powered by 14-pin control cord	Field maintenance, site fabrication	
22A	44	●	●	◉	●		CV	●	●	●	◉	.023–5/64 in. (0.6–2.0 mm)	Two quick-change drive rolls	Manufacturing, fabrication	Bench
24A	44	●	●	◉	●		CV	●	●	●	◉	.023–3/32 in. (0.6–2.4 mm)	Four quick-change drive rolls	Manufacturing, fabrication	
70 Series S/D/DX – Singles and Duals	44	●	●	◉	●		CV	●	●	●	◉	.023–1/8 in. (0.6–3.2 mm) Low-speed option recommended for 1/8 in. wires	Four drive roll, adjustable weld control	Heavy and light manufacturing, fabrication	
70 Series MPa Plus – Singles and Duals	44	●	●	●	●		CV	●	●	●	●	.023–5/64 in. (0.6–2.0 mm)	Aluma-Pro Plus or Pistol Plus guns for feeding soft wires	Manufacturing requiring multiple wire types	
70 Series Swingarc™ – Singles and Duals	46	●	●	◉	●		CV	●	●	●	◉***	.023–5/64 in. (0.6–2.0 mm)	8, 12 and 16 ft. booms, four drive rolls, adjustable weld control	Heavy and light manufacturing, fabrication	
70 Series Remote Configurations – Singles and Duals	46	●	●	◉	●		CV	●	●	●	◉***	.023–5/64 in. (0.6–2.0 mm)	Control box, cables and wire drive motor assemblies for generic booms or fixed automation	Heavy and light manufacturing, fabrication	

Product Key

Class: ● **Light Industrial** ● **Industrial** ● **Heavy Industrial** **Capability:** ● **Designed for this process** ◉ **Capable of this process**

*Requires MPa inverter power source.

**Certain self-shielded wires require CV output. Miller recommends a CV power source whenever possible.

***MPa models are designed for aluminum welding.

SuitCase® Series
Portable Feeders

Portable SuitCase feeders that set the standard for performance and provide extreme reliability to stand up to the demands of construction and fabrication.

SuitCase X-TREME 8VS *SuitCase X-TREME 12VS* *SuitCase X-TREME 12VS ArcReach* *SuitCase 12RC*

Portable!

SuitCase Series Features

Feature	X-TREME 8VS	X-TREME 12VS	X-TREME ArcReach 8VS	X-TREME ArcReach 12VS	12RC
Available with BTB Gun 300 A	●	●	●	●	●
Available w/Dura-Flux gun		●			
Available with S-Gun			●	●	
Remote voltage control (control cord required)					●
Remote voltage control without a cord			●	●	
Digital meters	◉	●	●	●	●
Impact-resistant case	●	●	●	●	●
Gas purge	●	●	●	●	●
Wire jog	●	●	●	●	●

● Standard ◉ Optional

Bernard BTB Gun 300 A shown.

EQUIP to WELD

*Models **include** male Tweco® connector installed on weld cable and Bernard™ BTB Gun 300 A with reversible dual size (.045 and 1/16 in.) VK drive rolls. 12VS model is also available with Dura-Flux™ flux-cored gun with reversible dual size (.068/.072 and 5/64 in.) VK drive rolls. ArcReach™ models are also available with Bernard S-Gun™ with reversible dual size (.045 and 1/16 in.) VK drive rolls. For more options, visit **MillerWelds.com/equiptoweld**.*

Setting the standard for performance

Heavy-duty drive motor with tachometer control provides wire feed speed that is accurate and consistent from the start of the weld to the finish and from one weld to the next. Consistent wire feed speed is very important with large-diameter cored wire, because small changes in wire feed speed make large changes in deposition rates.

Front panel has trigger hold, wire jog, and gas purge for easy operator access. (X-TREME™ feeders only.)

Wide voltage range for small and large wires with no contactor chatter or arc outages.

Ultra-low drag inlet guide pins make loading the wire easy and does not deform the wire on the way into the drive rolls improving wire feeding performance.

Scaled wire pressure knob provides easy adjustment and consistent pressure on the drive rolls and wire.

Digital meters with SunVision™ technology can display voltage, wire feed speed, and also amperage if desired. Meters can be seen clearly even in direct sunlight. (Meters are optional on 8VS.)

Unique and durable case

Impact-resistant, flame-retardant case provides strength and durability, and protects components and welding wire from moisture, dust and other contaminants.

Built-in slide rails allow you to drag the feeder into position for welding.

Innovative feeder door design allows you can change wire while feeder is standing upright or laying down.

Case is available in two sizes. (X-TREME™ feeders only.)

Extreme reliability

Potted and trayed main printed circuit board for the harshest environments adds exceptional reliability. Board has full-trigger isolation so a shorted gun trigger will not affect feeder operation.

Gun locking tab works with guns having corresponding locking grooves to prevent gun from being pulled out if the feeder is dragged by the gun.

Gas inlet recessed into back of case is protected from incidental contact by the weld cable, ensuring consistent and contaminant-free shielding gas delivery to the gun. **Double-filtered gas valve** helps keep dirt from clogging and affecting gas flow.

SuitCase® X-TREME™ 8VS and 12VS See literature no. M/6.42

Voltage-sensing feeders designed to run off of arc voltage from almost any welding power source. 8VS model is sized for an 8-inch spool of wire, can be carried to remote welding sites and fits through a 14-inch manhole/manway. 12VS model is sized for an 8- or 12-inch spool of wire. 12-inch spools are the most common in structural steel and fabrication.

SuitCase® X-TREME™ 8VS and 12VS ArcReach™ See literature no. M/6.42

ArcReach™ **Remote control of the power source without a cord.** With a SuitCase® ArcReach feeder and ArcReach power source you can change output voltage at the feeder, and save a trip to the power supply. No extra control cable to purchase, maintain, string or unstring – saving time and money. See page 33 and 36 for ArcReach power sources.

SuitCase® 12RC See literature no. M/6.5

Standard remote voltage control with a control cord. For applications where the feeder is within 100 feet of the power source and control cords are acceptable.

Heavy industrial CC/CV DC

Use with CC (except 12RC model) and CV, DC power sources.

Processes
- MIG (GMAW) • Flux-cored (FCAW)

Suggested power sources
- Dimension™ Series (pg 32/33)
- XMT® Series (VS model not compatible with RC feeder) (pg 34/36)
- Bobcat™ Series (pg 68)
- Trailblazer® Series (pg 70)
- Big Blue® Series (pg 72–76)

Note: Full functionality of ArcReach is only available with ArcReach power sources.

RC feeder requires power source with 14-pin connector.

Suggested guns
- Bernard™ Guns (pg 47)

Most popular accessories
- Extension Cables (12RC only, 1 required) (pg 114)
- Flowmeter Kit #300 343
- Shielding Gas Filter #195 189

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

**Additional packages are available – visit MillerWelds.com or your distributor.*

	Model	Stock Number*	Input Power	Input Welding Circuit Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
	SuitCase X-TREME 8VS	**(#951 583)** w/Bernard BTB Gun 300 A (without meters) **(#951 582)** w/Bernard BTB Gun 300 A	Operates on open-circuit voltage and arc voltage: 14–48 VDC/ 110 max. OCV	330 A at 60% duty cycle	50–780 ipm (1.3–19.8 m/min.) Actual range in CC mode is dependent on arc voltage applied	**Solid wire** .023–.052 in. (0.6–1.4 mm) **Flux-cored** .030–5/64 in. (0.8–2.0 mm)	8 in. (203 mm), 14 lb. (6.4 kg)	H: 12.75 in. (324 mm) W: 7.25 in. (184 mm) D: 18 in. (457 mm)	28 lb. (13 kg)
	SuitCase X-TREME 12VS	**(#951 543)** w/Bernard BTB Gun 300 A **(#951 544)** w/Bernard Dura-Flux gun		425 A at 60% duty cycle		**Solid wire** .023–.052 in. (0.6–1.4 mm) **Flux-cored** .030–5/64 in. (0.8–2.0 mm)	12 in. (305 mm), 45 lb. (20 kg)	H: 15.5 in. (394 mm) W: 9 in. (229 mm) D: 21 in. (533 mm)	35 lb. (15.9 kg)
ArcReach	SuitCase X-TREME 8VS ArcReach	**(#951 588)** w/Bernard S-Gun **(#951 584)** w/Bernard BTB Gun 300 A	Operates on open-circuit voltage and arc voltage: 14–48 VDC/ 110 max. OCV	330 A at 60% duty cycle	50–780 ipm (1.3–19.8 m/min.) Actual range in CC mode is dependent on arc voltage applied	**Solid wire** .023–.052 in. (0.6–1.4 mm) **Flux-cored** .030–5/64 in. (0.8–2.0 mm)	8 in. (203 mm), 14 lb. (6.4 kg)	H: 12.75 in. (324 mm) W: 7.25 in. (184 mm) D: 18 in. (457 mm)	28 lb. (13 kg)
ArcReach	SuitCase X-TREME 12VS ArcReach	**(#951 589)** w/Bernard S-Gun **(#951 581)** w/Bernard BTB Gun 300 A		425 A at 60% duty cycle		**Solid wire** .023–.052 in. (0.6–1.4 mm) **Flux-cored** .030–5/64 in. (0.8–2.0 mm)	12 in. (305 mm), 45 lb. (20 kg)	H: 15.5 in. (394 mm) W: 9 in. (229 mm) D: 21 in. (533 mm)	35 lb. (15.9 kg)
	SuitCase 12RC	**(#951 580)** w/Bernard BTB Gun 300 A **(#951 599)** w/Bernard BTB Gun 300 A, lift eye, and flowmeter	24 VAC, 10 A, 50/60 Hz	425 A at 60% duty cycle	50–700 ipm (1.3–17.8 m/min.)	**Solid wire** .023–.052 in. (0.6–1.4 mm) **Flux-cored** .030–5/64 in. (0.8–2.0 mm)	12 in. (305 mm), 45 lb. (20 kg)	H: 15.5 in. (394 mm) W: 9 in. (229 mm) D: 21 in. (533 mm)	31 lb. (14.1 kg)

ArcReach™

Increase, Improve and Maximize

Exclusive Miller® technology uses the weld cables to communicate changes in voltage settings. With an ArcReach System, voltage and wire-feed-speed controls are conveniently located at the operator's fingertips – right at the point of use – not back at the power source. By eliminating control cables to the feeder, cabling is streamlined and operators work at maximum efficiency.

Increase productivity — No time-consuming trips to the power source.

Improve weld quality — Reduces costly "work arounds".

Improve worker safety — Reduces operator hazards and injuries.

Maximize efficiency — Reduces costly cord set up, maintenance and repair.

20 Series
Industrial Bench Feeders

70 Series
Heavy-Industrial Bench Feeders

Designed for manufacturing, our popular bench feeders are available in two series with multiple models to fit your needs.

22A *S-74D* *S-74DX* *D-74 MPa Plus*

Bernard BTB Gun 300 A shown.

EQUIP to WELD™ *Models **include** Bernard™ BTB Gun 300 A (20 Series) **or** BTB Gun 400 A (70 Series, two with dual-wire models), .035/.045 in. drive rolls and Centerfire™ contact tips. For more options, visit **MillerWelds.com/equiptoweld**.*

20 and 70 Series Features

Feature	20 Series 22A	20 Series 24A	70 Series 74S	70 Series 74D	70 Series 74DX	70 Series 74MPA
Includes BTB Gun 300 A	●	●				
Includes BTB Gun 400 A			●	●	●	●
Trigger hold	●	●	●	●	●	●
Adjustable run-in control	◉	●			●	●
Automatic run-in control			●	●		●
Digital meters	◉	◉		●	●	●
Remote voltage control		●		●	●	●
Preflow/postflow	◉[1]	◉	●	●	●	●
Spot control	◉[1]	◉	●	●	●	●
Dual-wire models			●	●	●	●
Rotatable drive assembly			●	●	●	●
Accu-Mate™						●
Dual schedule control					●	
Trigger program select					●	
Trigger dual schedule					●	●
Sequence control					●	●
Locks and limits					●	●
Weld programs					4	2
Trigger schedule select						●
Alumination™						●
Synergic Pulsed MIG						●
Profile Pulse™						●

● **Standard** ◉ **Optional** [1]Field option.

Trigger hold allows the operator to make long welds without having to hold the trigger continuously. Reduces operator fatigue.

Miller® standard, quick-change drive rolls save time.

Quick-release drive-roll pressure arm allows drive roll change without losing spring preload setting.

Easy loading and threading of welding wire without having to release the drive roll pressure arm.

Each feeder includes a 15-foot Bernard BTB Gun 300 A (20 Series) or BTB Gun 400 A (70 Series, two with dual-wire models), plus a 10-foot 14-pin interconnecting cord.

Additional features for 70 Series feeders

Available in dual-wire models which allows two different wire types to be available on one feeder, avoiding downtime from changing spools and drive rolls.

Toolless rotatable drive assembly allows operator to rotate the drive housing, allowing a straight path for wire flow.

High-torque permanent-magnet motor, sealed ball bearing gear drive and solid-state speed and brake control are maintenance free for long life.

Trigger dual schedule for easily changing weld parameters while welding. Achieves the best weld settings for different joint configurations. (DX and MPa models only.)

22A and 24A See literature no. M/11.0

Simple and cost-effective feeders for industrial manufacturing and fabricating.

Ideal for most high-duty-cycle applications requiring day-in/day-out trouble-free operation.

On-board burnback and motor ramp control for excellent starting and stopping performance.

Two gear-driven drive rolls on 22A and **four gear-driven drive rolls** on 24A provide smooth, positive wire feed.

Additional features for 24A feeder

Remote voltage control at feeder for easier adjustments in the weld cell.

Adjustable run-in control for better arc-starting performance on a variety of wires.

Four gear-driven drive rolls provide more consistent feeding on larger wire diameters.

74S and 74D See literature no. M/3.0

Standard, simple feeders for most heavy-industrial applications, with the 74D providing increased accuracy and control of the most common weld parameters.

Digital meters (74D models only) ensure accuracy when presetting and reading actual voltage, amperage and wire feed speed.

Remote voltage control (74D models only) allows you to set both voltage and wire feed speed at the feeder, saving time and increasing weld quality because optimal weld parameters are easy to set.

74DX See literature no. M/3.0

Adds features for weld control and programs.

Adjustable run-in control for improved arc starts.

Dual schedule control allows the operator to switch between two preconfigured welding parameters without readjusting the machine, saving time and enhancing quality.

Trigger program select provides the ability to access any of the four active programs.

Sequence control gives the operator the ability to adjust all of the welding parameters: preflow, run-in, weld time, crater, burnback and postflow.

Locks and limits for restricting or limiting operator adjustments, such as voltage and wire feed speed parameters.

Four weld program memories allow operators to recall up to four previously used processes and their weld settings.

74 MPa Plus See literature no. M/3.0

Adds push-pull aluminum capabilities. Optimized with Invision™ MPa or XMT® MPa power sources.

Recommended aluminum solution. Dedicated XR Plus guns (gooseneck and pistol grip) work with MPa Plus feeders to coordinate wire feed speed of the gun and the feeder. This provides optimized aluminum feeding and welding performance. See chart below for gun models and stock numbers.

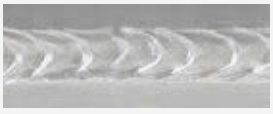
Trigger schedule select saves time when switching between two weld settings by simply tapping gun trigger.

Accu-Mate™ properly seats the MIG gun power pin for best feeding performance.

Alumination™ gives you the ability to use the extended reach of a push-pull system for consistent, versatile and dependable aluminum wire feeding.

Additional features when used with Invision MPa or XMT MPa power sources

Synergic pulsed MIG. As wire speed increases/decreases, pulse parameters also increase/decrease to match the right amount of power needed, eliminating the need to make additional adjustments.



Profile Pulse™ provides TIG appearance with MIG simplicity and productivity. Achieve "stacked dimes" without gun manipulation. Profile Pulse frequency can be changed to increase or decrease the spacing between the ripple pattern to achieve the desired weld appearance.

**Additional packages are available – visit MillerWelds.com or your distributor. **Wire kit #230 708 required to run 1/16 in. (1.6 mm) wire.*

Industrial 20 Series
Heavy Industrial 70 Series

CV DC *Use with CV, DC power sources.*

Processes
- MIG (GMAW) • Flux-cored (FCAW)
- Pulsed MIG (GMAW-P) with MPa Plus feeder and optional MPa power source

Suggested power sources
- CP-302 (22A and S-74S) (pg 12)
- Deltaweld® Series (pg 12)
- Invision™ MPa Series (pg 13)
- Dimension™ Series (pg 32/33)
- XMT® Series (except VS model) (pg 34)

Suggested guns
- Bernard™ Guns (pg 47)
- XR-Aluma-Pro™ Plus and XR™-Pistol Plus (see chart below)

Most popular accessories
- Feeder Cart #142 382 (pg 106)
- Extension Cables (pg 114)
- Spool Adapter #047 141 (pg 114)
- Turntable Assembly #146 236 (pg 114)
- Wire Straightener (pg 114)
- Hanging Bail #058 435
- Wire Reel Assembly #108 008
- Spool Covers
  - #057 607 For 20 and 70 Series single-wire models and left side of dual-wire models
  - #090 389 For right side of dual-wire models
- Single- and dual-remote configurations are available for 70 Series. For more information see page 46 and literature no. M/3.0.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Stock Number*	Input Power	Wire Feed Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
20 Series	**22A (#951 190)** **22A (#951 191)** w/run-in control **22A (#951 192)** w/digital display and voltage control **24A (#951 193)** **24A (#951 194)** w/digital display	24 VAC, 7 A, 50/60 Hz	75–750 ipm (1.9–19 m/min.)	**22A** .023–5/64 in. (0.6–2.0 mm) **24A** .023–3/32 in. (0.6–2.4 mm)	60 lb. (27 kg) coil with optional wire reel assembly #108 008	H: 11 in. (279 mm) W: 10.75 in. (273 mm) D: 23.5 in. (597 mm)	**22A** 36 lb. (15.4 kg) **24A** 40 lb. (18 kg)
70 Series (Single-wire models)	**S-74S (#951 196)** **S-74D (#951 198)** **S-74DX (#951 200)** **S-74 MPa Plus (#951 291)**	24 VAC, 10 A, 50/60 Hz	50–780 ipm (1.3–19.8 m/min.)	.023–1/8 in. (0.6–3.2 mm) Low speed motor required for 1/8 in. (3.2 mm) diameter wire (factory option) **MPa Plus model** **Hard wire** .023–5/64 in. (0.6–2.0 mm) **Aluminum**** .035–1/16 in. (0.9–1.6 mm)	60 lb. (27 kg) coil with optional wire reel assembly #108 008	H: 14 in. (356 mm) W: 12.5 in. (318 mm) D: 28 in. (711 mm)	58 lb. (26 kg)
70 Series (Dual-wire models)	**D-74S (#951 203)** **D-74D (#951 204)** **D-74DX (#951 206)** **D-74 MPa Plus (#951 292)**					H: 14 in. (356 mm) W: 21 in. (533 mm) D: 35 in. (889 mm)	87 lb. (39.5 kg)

Optional Push-Pull Gun *(For MPa Plus feeders only)*	Cable Length 15 ft. (4.6 m)	25 ft. (7.6 m)	35 ft. (10.6 m)	Welding Current Rating	Wire Feed Speed	Wire Type and Diameter Capacity	Dimensions	Net Weight
XR-Aluma-Pro Plus (Air-cooled)	**(#300 000 001)**	**(#300 001 001)**	–	300 A at 100% duty cycle	70–900 ipm (1.8–23 m/min.)	**Aluminum**** .030–1/16 in. (0.8–1.6 mm)	H: 5 in. (127 mm) W: 2.5 in. (64 mm) L: 17 in. (432 mm)	2.5 lb. (1.1 kg)
XR-Aluma-Pro Plus (Water-cooled)	**(#300 003 001)**	**(#300 004 001)**	–	400 A at 100% duty cycle				2.9 lb. (1.3 kg)
XR-Pistol Plus (Air-cooled)	**(#300 753)**	**(#300 754)**	**(#300 755)**	200 A at 100% duty cycle	70–900 ipm (1.8–23 m/min.)	**Aluminum**** .030–1/16 in. (0.8–1.6 mm)	H: 7.375 in. (187 mm) W: 1.875 in. (48 mm) L: 10.625 in. (270 mm)	2.2 lb. (1 kg)
XR-Pistol Plus (Water-cooled)	–	**(#300 757)**	**(#300 758)**	400 A at 100% duty cycle				2.4 lb. (1.1 kg)

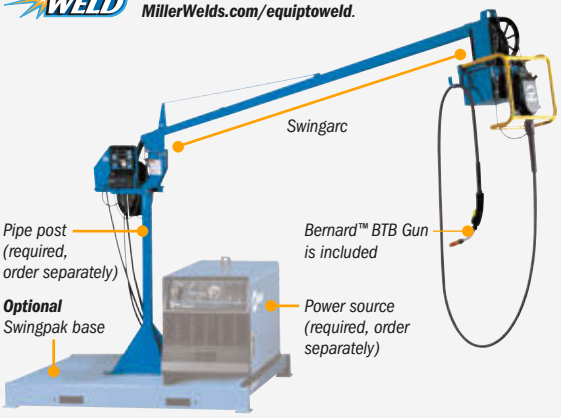
Wire Feeders

70 Series Swingarc™

See literature no. M/13.11

Swingarc boom-mounted wire feeders bring an extra dimension of flexibility and efficiency to weld stations dealing with large weldments, or wherever operator mobility is required.

EQUIP to WELD™ *Includes same gun, drive rolls and tips as 70 Series. For more options, visit* ***MillerWelds.com/equiptoweld****.*



Single- and dual-wire models with 8-, 12- or 16-foot booms are sized to accommodate a variety of weld cell layouts (16-, 24- or 32-foot diameter work area).

Counterbalance design makes it easy to position boom and **360-degree rotation and 60-degree lift angle** maximizes work area.

In-boom cable routing organizes hoses and cables for a cleaner work environment.

Each feeder includes a 15-foot Bernard BTB Gun 400 A (two with dual-wire models), plus a 10-foot 14-pin interconnecting cord to connect power source to boom control.

MPa Plus Swingarcs. Optimized for the Invision™ MPa and XMT® MPa power sources and available with single- or dual-wire feeders and three boom lengths.

Heavy industrial ● CV DC

Use with CV, DC power sources.

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)
- Pulsed MIG (GMAW-P) with MPa Plus feeder and optional MPa power source

Suggested power sources/guns
- Same as 70 Series

Most popular accessories
- Swingpak™ Base #183 997
- Pipe Post with 18 in. Base
  4 ft. #149 838 / 6 ft. #149 839
- **Single/Dual Spool Carrier** (pipe post not included)
  #300 353 For 4 ft. post
  #300 352 For 6 ft. post
  Designed to put spool hub assembly at 36 inches from base for easier wire spool installation.

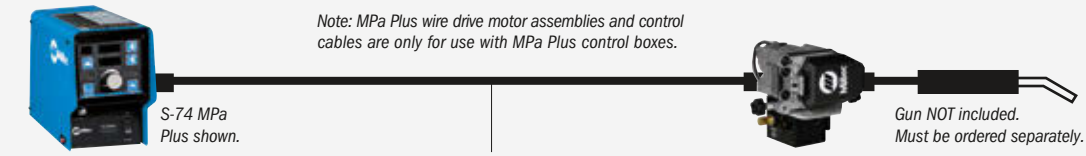
Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Stock Number with Single-Wire Feeders	Stock Number with Dual-Wire Feeders	Input Power	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Net Weight with Feeder
8 ft. (2.4 m) Boom	**SS-74S8 (#951 522)** w/S-74S **SS-74D8 (#951 525)** w/S-74D **SS-74DX8 (#951 528)** w/S-74DX **SS-74MPa Plus-8 (#951 437)** w/S-74 MPa Plus	**DS-74S8 (#951 531)** w/D-74S **DS-74D8 (#951 534)** w/D-74D **DS-74DX8 (#951 537)** w/D-74DX **DS-74MPa Plus-8 (#951 440)** w/D-74 MPa Plus	24 VAC, 10 A, 50/60 Hz	50–780 ipm (1.3–19.8 m/min.) Consult factory for low- and high-speed motor options on non-MPa feeders	.023–5/64 in. (0.6–2.0 mm)	60 lb. (27 kg) coil with optional wire reel assembly #108 008	**Single-wire feeder** 110 lb. (50 kg) **Dual-wire feeder** 134 lb. (61 kg)
12 ft. (3.7 m) Boom	**SS-74S12 (#951 523)** w/S-74S **SS-74D12 (#951 526)** w/S-74D **SS-74DX12 (#951 529)** w/S-74DX **SS-74MPa Plus-12 (#951 438)** w/S-74 MPa Plus	**DS-74S12 (#951 532)** w/D-74S **DS-74D12 (#951 535)** w/D-74D **DS-74DX12 (#951 538)** w/D-74DX **DS-74MPa Plus-12 (#951 441)** w/D-74 MPa Plus					**Single-wire feeder** 160 lb. (73 kg) **Dual-wire feeder** 207 lb. (94 kg)
16 ft. (4.9 m) Boom	**SS-74S16 (#951 524)** w/S-74S **SS-74D16 (#951 527)** w/S-74D **SS-74DX16 (#951 530)** w/S-74DX **SS-74MPa Plus-16 (#951 439)** w/S-74 MPa Plus	**DS-74S16 (#951 533)** w/D-74S **DS-74D16 (#951 536)** w/D-74D **DS-74DX16 (#951 539)** w/D-74DX **DS-74MPa Plus-16 (#951 442)** w/D-74 MPa Plus					**Single-wire feeder** 210 lb. (95 kg) **Dual-wire feeder** 280 lb. (127 kg)

70 Series Remote Configurations

See literature no. M/3.0

Remote wire feeder control box and wire drive assembly for non-Miller boom applications.



Note: MPa Plus wire drive motor assemblies and control cables are only for use with MPa Plus control boxes.

Single-wire control box
#300 881 S-74S
#300 882 S-74D
#300 883 S-74DX
#300 738 S-74 MPa Plus

Motor control cable
Standard: 11 conductor
MPa Plus: 14 conductor

Wire drive motor assembly
#300 904 Standard left-hand drive
#300 740 MPa Plus left-hand drive
MPa Plus drive can be used with push-only guns, or XR-AlumaPro™ Plus and Pistol Plus push-pull guns.

Motor Control Cable
11 conductor

Motor control cable
Standard: 11 conductor
MPa Plus: 14 conductor

Push-only wire drive motor assembly
#300 741 001 Standard right-hand drive
#300 741 MPa Plus right-hand drive

Dual-wire control box
#300 886 D-74S
#300 887 D-74D
#300 888 D-74DX
#300 739 D-74 MPa Plus

Wire drive motor assembly
#300 904 Standard left-hand drive
#300 740 MPa Plus left-hand drive
MPa Plus drive can be used with push-only guns, or XR-AlumaPro™ Plus and Pistol Plus push-pull guns.

Heavy industrial ● CV DC

Use with CV, DC power sources.

Processes
- MIG (GMAW) ▪ Flux-cored (FCAW)
- Pulsed MIG (GMAW-P) with MPa Plus control box and optional MPa power source

Suggested power sources/guns
- Same as 70 Series

Most popular accessories
- Motor Control Cable (11 conductor)*
  #254 935 010 10 ft. (3 m)
  #254 935 025 25 ft. (7.6 m)
  For push-only gun configurations.
- MPa Plus Motor Control Cable (14 conductor)*
  #254 864 010 10 ft. (3 m)
  #254 864 025 25 ft. (7.6 m)
  For MPa Plus configurations only – single-wire or left side of dual-wire.

**For additional lengths visit MillerWelds.com/equiptoweld.*

- **Feeder Base** #195 369
  For use with spooled wire.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Bernard™ Semi-Automatic Guns

Air-Cooled MIG and Flux-Cored Guns

Miller integrates industrial-duty Bernard semi-automatic MIG guns on various Miller® industrial wire feeders to bring customers one complete system for their welding applications.

BERNARD™

BTB MIG Guns

See Bernard literature no. SP-BTB

Our rugged Bernard BTB (Best of the Best) MIG guns bring together all the best features and options from our former Q-Gun™, S-Gun™ and T-Gun™ MIG guns into a single lineup.

From front to back, Bernard BTB guns are designed to withstand the rigors of industrial welding applications

- Compatible with three high-performance consumable lines – Centerfire,™ Quik Tip™ and TOUGH LOCK™
- Compatible with Universal Conventional or front-loading QUICK LOAD™ liners which are ideal for boom-mounted equipment or where uptime is critical
- Fixed or rotatable aluminum armored necks in various lengths and angles
- Choice of six different handles ensures a comfortable, ergonomic fit
- Front and rear internal cable connections are compression fit (instead of crimped) to optimize conductivity, reduce heat and increase gun life
- Optional ultra-heavy-duty steel monocoil cable provides extra reinforcement
- One year manufacturer's warranty with lifetime warranty on rear strain relief

Fume Extraction MIG Guns

See Bernard literature no. SP-CLA (Clean Air) and SP-FFE (FILTAIR)

Maintaining a clean working environment is important and Bernard understands the need for a reliable fume extraction solution. Extract fumes at the weld bead using either of our two models.

Bernard Clean Air™ fume extraction MIG gun

- Available in 400-, 500- and 600-amp models
- Choice between Centerfire, Quik Tip or TOUGH LOCK consumables
- Ergonomic, lightweight straight handle improves operator comfort

Bernard FILTAIR™ fume extraction MIG gun

- Available in 300- and 400-amp models
- Choice between Centerfire or Quik Tip consumables
- Small lightweight curved handle for maximum maneuverability and comfort

Dura-Flux™ Self-Shielded Flux-Cored Guns

See Bernard literature no. SP-DF

For structural steel applications, bridge construction and heavy equipment repair, Bernard offers two lines of self-shielded flux-cored guns.

Dura-Flux Gun with replaceable power cable liner

- Replaceable power cable liner allows quick and easy power cable maintenance
- Quik Tip consumables provide excellent heat transfer and electrical conductivity

Dura-Flux Gun with fixed power cable liner

- Ultra-heavy-duty steel monocoil power cable is highly resistant to kinking
- Centerfire consumables are easy to use and high performing, providing better arc starts, less spatter and more consistent welds

MORE on the WEB

For more detailed information, visit **BernardWelds.com**

Industrial

Processes

▪ MIG (GMAW) ▪ Flux-cored (FCAW)

Suggested equipment

- Millermatic® 350P/350P Auto Body Aluminum Repair System (pg 10/15)
- CP-302 (pg 12)
- Deltaweld® Series (pg 12)
- Invision™ MPa Series (pg 13)
- Axcess® (pg 22)
- Continuum™ (pg 23)
- Multimatic™ 200 (pg 31)
- Shopmate™ 300 DX (pg 31)
- Dimension® 302/452 (pg 32)
- Dimension® 650 (pg 33)
- XMT® Series (pg 34)
- XMT® ArcReach™ (pg 36)
- PipeWorx 350 FieldPro™ (pg 38)
- PipeWorx 400 (pg 38)
- SuitCase® Series (pg 42)
- 20 and 70 Series (pg 44)
- 70 Series Swingarc™ (pg 46)
- Big Blue® 350 PipePro® (pg 73)
- FILTAIR® 130/400 (pg 100)

Most popular consumables

Centerfire Consumable Series

Diffusers (amps)	
DS-1	200, 300
D-1	400, 500, 600
Brass Nozzles (inches)	
NS-1218B	1/2 ID, 1/8 Rec., Sm.
Copper Nozzles (inches)	
NS-5818C	5/8 ID, 1/8 Rec., Sm.
N-5818C	5/8 ID, 1/8 Rec., Lg.
N-5814C	5/8 ID, 1/4 Rec., Lg.
N-3414C	3/4 ID, 1/4 Rec., Lg.
Contact Tips (inches)	
T-035	.035
T-045	.045

Quik Tip Consumable Series

Diffusers (amps)	
D118Q	200, 300, 400
D114Q	500, 600
Plated Copper Nozzles (inches)	
N1C58Q	5/8 ID
N1C34HQ	3/4 ID, HD
Contact Tips (inches)	
T1035	.035
T1045	.045

TOUGH LOCK Consumable Series

Diffusers (amps)	
404-18	200, 300, 400 SD
404-26	300, 400, 500, 600 HD
Copper Nozzles (inches)	
401-4-62	5/8 ID, 1/8 Rec., SD
401-6-62	5/8 ID, 1/8 Rec., HD
401-5-62	5/8 ID, 1/4 Rec., HD
Brass Nozzles (inches)	
401-5-75	3/4 ID, 1/8 Rec., HD
Contact Tips (inches)	
403-14-35	.035 SD
403-20-35	.035 HD
403-14-45	.045 SD
403-20-45	.045 HD

Visit BernardWelds.com or your distributor for other Bernard consumable options.

Stick | SMAW

Also see TIG and Multiprocess sections for machines that can stick weld.

For more detailed information, visit **MillerWelds.com/stick** MORE on the WEB

Product Guide

	Product Guide	Page	Class	Stick	DC TIG	Flux-cored*	CAC-A	Portability	Weldable Metals	Welding Amperage Range	Special Features	Typical Applications
1-Phase	Thunderbolt® XL 225 AC	48	●	●				Optional running gear	Steel, stainless	30–235 AC	Infinite current control	Education, maintenance/repair, farm
	Thunderbolt® XL 225 AC/150 DC	48	●	●						30–235 AC 30–160 DC	Infinite current control	Education, maintenance/repair, farm
	Dialarc® 250 AC/DC	48	●	●	◉	◉	3/16"	Lift eye, optional running gear		35–300 AC 35–265 DC	One control knob with high/low range	Education, maintenance/repair, fabrication
	Maxstar® 150 S	49	●	●				Shoulder strap, optional case		20–150 DC	120–240 V Auto-Line,™ MVP™ plugs	MRO, ship installation/repair, farm/ranch
1- & 3-Ph	Maxstar® 210 STR	49	●	●	●			Shoulder strap, handles, optional carts	Steel, stainless	5–210 DC	120–480 V Auto-Line,™ stick/TIG machine	Construction, fabrication, pipe, steel erection, shipbuilding
	CST™ 280	50	●	●	●			Handle, optional cart		5–280 DC	Portable at 41 lb., optional meter, also available in multi-unit rack	Construction, fabrication, pipe, steel erection, shipbuilding
3-Phase	CST™ 280 Rack	50	●	●	●		5/16"**	Lift eye, optional running gear	Steel, stainless	5–280 DC	Up to 4 or 8 operators, lightweight	Construction, maintenance/repair, shipbuilding
	Gold Star® 452	49	●	●	●	◉	5/16"			20–590 DC	Built-in arc control	Steel erection, pipe, fab, shipbuilding, foundries
	Gold Star® 652	49	●	●	●	◉	3/8"			50–850 DC	Built-in arc control	Steel erection, pipe, fab, shipbuilding, foundries

Product Key

Class: ● Light Industrial ● Industrial ● Heavy Industrial Capability: ● Designed for this process ◉ Capable of this process

New! or Improved! products appear in blue type. *Constant-current (stick) machines can utilize voltage-sensing wire feeders for some flux-cored applications. **Two machines paralleled.

Thunderbolt® XL 225 AC and 225 AC/150 DC

See literature no. AC/2.0 (AC model) and AD/8.0 (AC/DC model)

Thunderbolt XL 225 AC shown.

Economical stick machines with precise, dependable control.

Accu-Set™ amperage indicator provides precise heat control.

Unit allows higher duty cycle when amperage decreases.

Infinite current control allows the operator to adjust output by as little as one-amp increments.

Output selector switch on AC/DC units allows you to quickly select AC, DCEP or DCEN without adjusting the output leads.

Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

Light industrial ●

CC AC/DC 1 Phase *225 AC model is AC only.*

Process ▪ Stick (SMAW)

Comes complete with

- 15 ft. (4.5 m) No. 4 electrode cable with heavy-duty electrode holder
- 10 ft. (3 m) work cable with clamp
- Power cord with plug

Most popular accessories

- Thunderbolt XL Running Gear #043 927 (pg 107)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Stock Number	Welding Mode	Welding Amperage Range	Rated Output at 20% Duty Cycle, 60 Hz (15% Duty Cycle, 50 Hz)	Rated Output at 100% Duty Cycle	Amps Input at Rated Output	Max. Open-Circuit Voltage	Dimensions	Net Weight
Thunderbolt XL 225 AC (CSA)	**(#903 641)** 230 V, 50/60 Hz	AC	30–235	225 A at 25 V	100 A	47.5	80 VAC	H: 18.75 in. (476 mm) W: 12.75 in. (323 mm) D: 17.5 in. (445 mm)	85 lb. (39 kg)
Thunderbolt XL 225 AC/150 DC (CSA)	**(#903 642)** 230 V, 50/60 Hz	AC	30–235	225 A at 25 V	100 A	47.5	80 VAC		104 lb. (47 kg)
		DC	30–160	150 A at 25 V	65 A	47.5	80 VDC		

Dialarc® 250 AC/DC

See literature no. AD/2.1

Superb performance and versatility in a flexible stick machine.

Single-dial infinite current control simplifies and allows precise weld output adjustment.

High and low ranges for both AC and DC allow greater control of weld performance.

Forced-draft cooling fan ensures cooler running product, extending life of power source.

Superior 6010 and 7018 stick welding performance offers wide range of electrode versatility.

High output and duty cycle allow unit to handle nearly all stick welding needs.

Optional remote weld output control provides current control without going back to power source saving time and effort.

Light industrial ● CC AC/DC 1 Phase

Processes

- Stick (SMAW)
- Air carbon arc cutting and gouging (CAC-A) (3/16 in. carbons)

Most popular accessories

- No. 19 Running Gear #041 580

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Stock Number	Welding Mode	Welding Amperage Range	Rated Output at 30% Duty Cycle	Amps Input at Rated Output, 60 Hz 200 V	208 V	230 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
Dialarc without Power Factor Correction	**(#907 017)** 200(208)/230/460 V	AC	35–300	225 A at 29 V	84	–	73	36	29	16.8	9.8	70 VAC	H: 24.25 in. (616 mm) W: 19 in. (483 mm) D: 28 in. (711 mm)	360 lb. (163 kg)
		DC	35–265	225 A at 29 V	92	–	80	40	32	18.6	11.8	79 VDC		
Dialarc with Power Factor Correction	**(#907 015)** 208/230/460/575 V	AC	35–300	225 A at 29 V	–	60	55	27	22	12.5	9.9	70 VAC		365 lb. (166 kg)
		DC	35–265	225 A at 29 V	–	66	60	30	24	13.7	10.8	79 VDC		

Maxstar® 150 S

See literature no. DC/27.0

Maxstar 150 S with X-CASE (#907 134 012) shown.

Best in class — provides maximum portability and performance in the most compact stick package in the industry. Packs dependability and performance all in one machine.

Multi-voltage plug (MVP™) allows for connection to 120- or 240-volt receptacles without tools. Choose the plug that fits the receptacle and connect it to the power cord.

Portable with adjustable shoulder strap. Easy to transport at only 13.2 pounds.

AUTOLINE Power Management Technology Allows for any input voltage hook-up (120–240 V) with no manual linking, providing convenience in any job setting.

Adaptive Hot Start™ for stick arc starts reduces electrode sticking.

Single amperage range allows operator to accurately set amperage on both 120- or 240-volt primary power.

Note: See page 52 in the TIG section for Maxstar 150 STL and STH.
**Sense voltage for stick.*

Light industrial ● CC DC 1 Phase

Process ▪ Stick (SMAW)

Comes complete with
- 10 ft. power cord with MVP plugs for 120 V and 240 V
- 13 ft. (4 m) electrode cable with holder and 25 mm Dinse-style connector
- 10 ft. (3 m) work cable with clamp and 25 mm Dinse-style connector

#907 134 012 includes above plus
- Protective X-CASE™

Most popular accessories
- MVP Plugs (pg 110)
- Protective X-CASE™ #300 184 (pg 110)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz	KVA at Duty Cycle	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
(#907 134)	115 V	20–100	100 A at 24 V, 35% duty cycle	26.4	3.0	3.0	90 VDC (12–16 VDC*)	H: 9 in. (229 mm) W: 5.5 in. (140 mm) D: 13.25 in. (337 mm)	13.2 lb. (6.0 kg)
(#907 134 012) with X-CASE	230 V	20–150	150 A at 26 V, 30% duty cycle	21.6	4.9	4.7			

Maxstar® 210 STR

See literature no. DC/32.1

Note: See page 54 in the TIG section for Maxstar 210 Series.

Maximum flexibility with automatic connection to any input power while maintaining the best DC stick/TIG welding performance in its product class.

AUTOLINE Power Management Technology Allows for any input voltage hook-up (120–480 V) with no manual linking, providing convenience in any job setting.

Lift-Arc™ provides TIG arc initiation without the use of high frequency.

Dual schedule allows operators to switch between welding parameters for specific electrodes without readjusting the machine.

Adaptive Hot Start™ for stick arc starts.

Remote amperage control and digital meter.

Portable with adjustable shoulder strap.

**Sense voltage for stick and Lift-Arc TIG.*

Industrial ● CC DC 3 Phase 1 Phase

Processes
▪ Stick (SMAW) ▪ TIG (GTAW)

Comes complete with
- 8 ft. (2.4 m) power cord (no plug)
- Two 50 mm Dinse-style connectors

Most popular accessories
- 12.5 ft. (3.8 m) Weldcraft™ A-150 Valve TIG torch #WP-17V-25-2 (pg 59)
- Remote Controls (pg 112)
- Air-Cooled TIG Torch Connector (pg 113)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Welding Process	Input Power	Welding Amperage Range	Rated Output	Phase	Amps Input at Rated Load Output, 50/60 Hz 120 V	208 V	240 V	400 V	480 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
(#907 682)	Stick	208–480 V	5–210	160 A at 26.4 V, 60% duty cycle	Three-phase	–	15	13	8	6	5.5	5.2	80 VDC (11 VDC*)	H: 13.6 in. (346 mm) W: 8.6 in. (219 mm) D: 19.5 in. (495 mm)	36 lb. (16.3 kg)
					Single-phase	–	26	22	13	11	5.3	5.3			
		120 V	5–100	90 A at 23.6 V, 60% duty cycle	Single-phase	23	–	–	–	–	2.8	2.8			
	TIG	208–480 V	1–210	210 A at 18.4 V, 60% duty cycle	Three-phase	–	14	12	7	6	5.2	4.9			
					Single-phase	–	24	20	12	10	4.9	4.9			
		120 V	1–210	125 A at 15 V, 60% duty cycle	Single-phase	22	–	–	–	–	2.6	2.6			

Gold Star® Series

See literature no. DC/8.1

Gold Star 452 shown.

WIRELESS REMOTE COMPATIBLE *See page 113*

Rugged, reliable performance and superior arc characteristics.

- **Hot Start™ and built-in arc control**
- **Enclosed circuit board**
- **Thermal overload protection with light**
- **Fan-On-Demand™**
- **15 A, 115 V duplex receptacle**
- **Power efficient**
- **Remote control capability**
- **Optional digital volt and amp meters (#300 359 Field).** Easy to install, front-panel mount.

Note: For models AFTER serial number KG283595.

Heavy industrial ● CC DC 3 Phase

Processes
- Stick (SMAW) ▪ TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (carbons – 452: 5/16 in., 652: 3/8 in.)
- Flux-cored (FCAW)
- MIG spray transfer (GMAW) with voltage-sensing feeder

Visit MillerWelds.com or your distributor for Miller® options and accessories.

Model	Stock Number	Amperage Range in CC Mode	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions *(Includes lift eye and strain relief)*	Net Weight
Gold Star 452	**(#903 374)** 200(208)/230/460 V **(#903 400)** 230/460/575 V	20–590	450 A at 38 VDC, 60% duty cycle	102	89	45	36	35.5	23.3	72 VDC	H: 30 in. (762 mm) W: 23 in. (585 mm) D: 38 in. (966 mm)	404 lb. (183 kg)
Gold Star 652	**(#903 402)** 230/460/575 V	50–850	650 A at 44 VDC, 60% duty cycle	–	124	62	50	49.4	36	72 VDC		505 lb. (229 kg)

CST™ 280

See literature no. DC/29.55

Durable power source designed for the construction industry. Ideal for stick electrodes up to 3/16-inch and TIG welding of pipe and plate.

WIRELESS REMOTE COMPATIBLE

See page 113

CST 280

CST 280 with meter

Superior stick arc performance even on the difficult-to-run electrodes like E6010.

Simple voltage-changeover switch saves time when changing primary voltage. Input voltage can be changed without removal from inverter rack or removal of machine case.

***NEW!* Optional digital meter** for more precise control when presetting or monitoring welding amperage.

Portable in the shop or at the jobsite – at 41 pounds (18.6 kg) the CST 280 is easily moved from location to location.

Lift-Arc™ start provides TIG arc starting without the use of high frequency.

Rack mountable for protection, storage and transportation of multiple power sources while using a single primary power cable.

**Output on single-phase reduced to comply with current limitation on input cable.*

Industrial ● CC DC 3 Phase 1 Phase

Processes
- Stick (SMAW)
- TIG (GTAW)

Comes with
- 6 ft. (1.8 m) power cord
- One set of male connectors (Dinse-style model only)

Most popular accessories
- CST 280 Rack (see below)
- Remote Controls (pg 112/113)
- For TIG torches see literature no. DC/29.55

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Welding Process	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Load Output, 50/60 Hz 208 V	220 V	230 V	400 V	440 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
(#907 244) Dinse **(#907 244 011)** Tweco® **(#907 696)** Tweco® with meter 220-230/460-575 V	Stick/TIG	Three-phase	5-280	280 A at 31.2 V, 35% duty cycle	–	35.0	34.2	–	–	17.8	14.7	14.6	10.2	77 VDC	H: 13.5 in. (343 mm) W: 7.5 in. (191 mm) D: 18 in. (457 mm)	41 lb. (18.6 kg)
				200 A at 28 V, 100% duty cycle	–	23.3	22.5	–	–	11.7	9.7	9.6	6.4			
		Single-phase	5-200	200 A at 28 V, 50% duty cycle*	–	43.9	43.0	–	–	–	–	10.1	6.6			
				150 A at 26 V, 100% duty cycle*	–	32.7	32.0	–	–	–	–	7.3	4.6			
(#907 251) Dinse **(#907 251 011)** Tweco® **(#907 563)** Dinse with meter 208-230/400-460 V	Stick/TIG	Three-phase	5-280	280 A at 31.2 V, 35% duty cycle	36.0	–	34.0	19.8	18.0	17.5	–	14.0	10.2	67 VDC		
				200 A at 28 V, 100% duty cycle	23.5	–	22.8	13.5	12.0	12.7	–	10.2	6.9			
		Single-phase	5-200	200 A at 28 V, 50% duty cycle*	43.9	–	43.0	–	–	–	–	9.9	6.5			
				150 A at 26 V, 100% duty cycle*	35.0	–	32.9	–	–	–	–	7.6	4.8			

CST™ 280 Racks

See literature no. DC/18.82

Rugged enclosure provides simple means for protecting and transporting multiple welding power sources for construction, maintenance/repair and shipbuilding applications.

WIRELESS REMOTE COMPATIBLE

See page 113

CST 280 8-pack rack shown.

Note: For additional rack systems see Dimension™ 650 (pg 33), XMT® (pg 35/37) and PipeWorx FieldPro™ (pg 39).

Light weight and small footprint for easy transportation. The low weight enables the use of elevators to move the rack.

All controls including power switch are located on front of machine for easy access.

Top cover protects machines from falling debris.

Lift eye simplifies crane or overhead lifting device transport.

Lift truck fork pockets.

One main disconnect box with branched fusing for each machine.

Common output ground connection (for same polarity use only).

Optional rack running gear available for moving the rack.

Heavy industrial ● CC DC 3 Phase

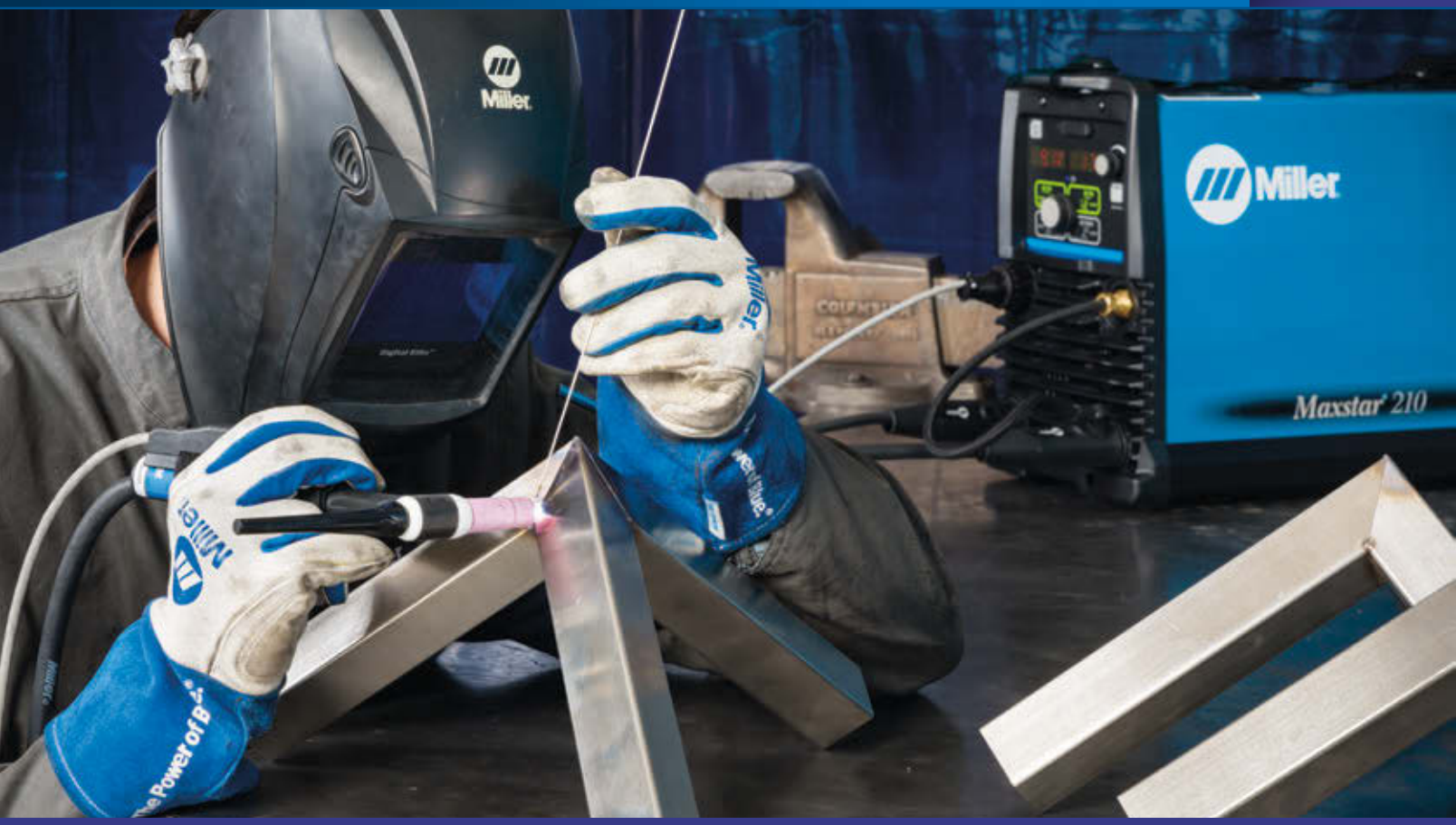
Processes
- Stick (SMAW)
- TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (5/16 in. carbons with paralleled CST 280 units)

Most popular accessories

- **4-Pack Rack Running Gear** #195 114
- 8-Pack Rack Running Gear #195 436

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Stock Number	Rack Capacity	Input Power to Rack	Amps Input at Rated Output, 50/60 Hz 220 V	230 V	400 V	440 V	460 V	575 V	KVA	KW	Dimensions	Net Weight
4-Pack Rack	**(#907 245)** Dinse **(#907 247)** Tweco®	4 units	220-230/460-575 V, three-phase, 50/60 Hz. *Note: CST 280 machines are factory-linked for 460-575 V. Dinse units include one set of male connectors; Tweco units do not. See above for information on CST 280.*	137	134	79	72	70	57	58.4	40.8	H: 50.75 in. (1,289 mm) 4-pack W: 25.5 in. (648 mm) 8-pack W: 46 in. (1,168 mm) D: 26.5 in. (673 mm)	355 lb. (161 kg)
8-Pack Rack	**(#907 365)** Tweco®	8 units		274	268	158	145	140	114	116.8	81.6		640 lb. (290 kg)
Empty Rack	**(#195 051)**	4 units	–	–						–	–	Same as 4-pack rack	166 lb. (75 kg)
	(#300 580)	8 units										Same as 8-pack rack	280lb. (127 kg)



Product Guide

	Page	TIG	Pulsed TIG	Stick	CAC-A	MIG/Flux-cored	Max. Electrode Diameter E6010/11	E6013	E7018	E7024	CAC-A	Material Thickness Range (TIG)	Welding Amperage Range	Pulse Capability	Weight	Generator Power Requirement	
Maxstar® 150	52	●	◉	●			–	1/8 in.	1/8 in.	3/32 in.	–	.020–3/16 in.	5–150 A	0.5, 1, 2.5, 60 PPS (STH model)	13.7 lb. (6.2 kg)	5 kW	DC (Steel)
Maxstar® 210	54	●	◉	●			3/16 in.	3/16 in.	5/32 in.	5/32 in.	–	.002–1/4 in.	1–210 A	0.1–250 PPS (base model) 0.1–500 PPS (DX model)	38 lb. (17.2 kg)	9 kW	
Maxstar® 280	54	●	●	●	●		7/32 in.	3/16 in.	3/16 in.	3/16 in.	3/16 in.	.004–3/8 in.	1–280 A	0.1–250 PPS (base model) 0.1–500 PPS (DX model)	47 lb. (21.3 kg)	11 kW	
Maxstar® 350	56	●	●	●	●		5/16 in.	5/16 in.	1/4 in.	1/4 in.	1/4 in.	.012–5/8 in.	3–350 A	0.1–5,000 PPS	135 lb. (61 kg)	12 kW	
Maxstar® 700	56	●	●	●	●		5/16 in.	5/16 in.	5/16 in.	5/16 in.	3/8 in.	.020–1 in.	5–700 A	0.1–5,000 PPS	198 lb. (90 kg)	32 kW	
Diversion™ 165/180	52	●					–	–	–	–	–	.030–3/16 in. (alum.) .025–3/16 in. (steel)	10–165 A (165) 10–180 A (180)	–	50 lb. (23 kg)	5.5 kW	AC/DC (Aluminum/Steel)
Syncrowave® 210	53	●	●	●		◉	5/32 in.	1/8 in.	1/8 in.	3/32 in.	–	.020–1/4 in. (aluminum/steel)	5–210 A	0.1–50 PPS (expandable)	133.5 lb. (61 kg)	6 kW	
Dynasty® 210	54	●	●	●			3/16 in.	3/16 in.	5/32 in.	5/32 in.	–	.012–1/4 in. (alum.) .002–1/4 in. (steel)	2–210 A (AC) 1–210 A (DC)	0.1–250 PPS (base model) 0.1–500 PPS (DX model)	47 lb. (21.3 kg)	9 kW	
Dynasty® 280	54	●	●	●	●		7/32 in.	3/16 in.	3/16 in.	3/16 in.	3/16 in.	.012–3/8 in. (alum.) .004–3/8 in. (steel)	2–280 A (AC) 1–280 A (DC)	0.1–250 PPS (base, DC) 0.1–500 PPS (DX model)	52 lb. (23.6 kg)	12.5 kW	
Dynasty® 350	56	●	●	●	●		5/16 in.	5/16 in.	1/4 in.	1/4 in.	1/4 in.	.015–5/8 in. (alum.) .012–5/8 in. (steel)	3–350 A	0.1–500 PPS (AC) 0.1–5,000 PPS (DC)	135 lb. (61 kg)	13 kW	
Dynasty® 700	56	●	●	●	●		5/16 in.	5/16 in.	5/16 in.	5/16 in.	3/8 in.	.020–1 in. (aluminum/steel)	5–700 A	0.1–500 PPS (AC) 0.1–5,000 PPS (DC)	198 lb. (90 kg)	35 kW	
Syncrowave® 250 DX	57	●	◉	●	●		1/4 in.	1/4 in.	7/32 in.	3/16 in.	3/16 in.	.015–3/8 in. (alum.) .012–1/2 in. (steel)	3–310 A	0.25–10 PPS (optional)	378 lb. (172 kg)	22 kW	
Syncrowave® 350 LX	57	●	●	●	●		5/16 in.	5/16 in.	1/4 in.	1/4 in.	1/4 in.	.015–1/2 in. (alum.) .012–5/8 in. (steel)	3–400 A	0.25–10 PPS	496 lb. (225 kg)	30 kW	

Product Key Capability: ● All models ◉ Some models New! or Improved! products appear in blue type.

Diversion™ 165 and 180 AC/DC TIG

See literature no. AD/1.5

Professional-grade arc in a package designed specifically for personal users. Contains all of the features you need — simplicity combined with superior performance and value.

Diversion 165 *Diversion 180*

TIG Welding Capability

Max. 3/16 in. (4.8 mm)	Max. 3/16 in. (4.8 mm)
Steel	Aluminum
Min. 0.025 in. (0.6 mm)	Min. 0.030 in. (0.75 mm)

Easy-to-understand operator interface. Power up, select material type, set material thickness range and start welding!

Inverter-based, AC/DC power source provides a more consistent welding arc while using less power.

HF arc starting for non-contact arc initiation that reduces tungsten and material contamination.

Portable. Easy to transport at 50 pounds.

Fan-On-Demand™ power source cooling system operates only when needed, reducing noise, energy use and the amount of contaminates pulled through the machine.

Auto-postflow adjusts the length of postflow time based on the amperage setting, shielding your tungsten and eliminating the need to set the postflow time.

Advanced squarewave AC provides a fast freezing weld puddle and deeper penetration.

Weldcraft™ **A-150 torch with Diamond Grip**™ provides more comfortable grip and reduces operator fatigue.

Diversion 180 includes **multi-voltage plug (MVP**™**)** which allows for connection to 120- or 240-volt receptacles without tools. Choose the plug that fits the receptacle and connect it to the power cord.

**While idling.*

Light industrial ● CC AC/DC 1 Phase

Process ▪ TIG (GTAW)

Comes with
- Power cord with 50 A, 240 V plug (165 model) or MVP plugs for 120 V and 240 V (180 model)
- 12.5 ft. (3.8 m) Weldcraft™ A-150 TIG torch
- 12 ft. (3.7 m) work cable with clamp
- RFCS-RJ45 remote foot control
- Flow gauge regulator with hose

Most popular accessories
- Running Gear/Cylinder Rack #301 239 (pg 106)
- Protective Cover #300 579 (pg 112)
- RCCS-RJ45 Remote Fingertip Control #301 146 (pg 112)
- RJ45 to 14-Pin Adapter Cord #300 688
- Weldcraft™ Flexible Torch Body Kits (requires handle #105Z55R)
  A-125F (#WP-9F)
  A-150F (#WP-17F)
- TIG Torch Accessory Kit #AK2C (see pg 53 for contents list)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

AC/DC

Model/ Stock Number	Input Power	Welding Amp Range	Rated Output	Amps Input at Rated Output	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
Diversion 165 (#907 626)	230 V	10–165	150 A at 16 V, 20% duty cycle	23 (.20*)	5.3 (.04*)	3.7 (.02*)	80 VDC	H: 17 in. (433 mm) W: 9.875 in. (251 mm) D: 23.875 in. (608 mm)	50 lb. (23 kg)
			165 A at 16.6 V, 15% duty cycle	25.5 (.20*)	5.9 (.04*)	4.2 (.02*)			
Diversion 180 (#907 627)	115 V	10–125	125 A at 15 V, 35% duty cycle	26.5 (.88*)	3.1 (.1*)	3.0 (.03*)			
	230 V	10–180	150 A at 16 V, 20% duty cycle	16 (.44*)	3.7 (.1*)	3.6 (.03*)			
			180 A at 17.2 V, 10% duty cycle	20.5 (.44*)	4.7 (.1*)	4.6 (.03*)			

Maxstar® 150 STL and STH DC TIG and Stick

See literature no. DC/27.1 (STL) and DC/27.2 (STH)

Maximum portability and performance provided in one compact TIG/stick package.

Maxstar 150 STH TIG/stick package with remote fingertip control and X-CASE (#907 136 017) shown.

TIG Welding Capability

Max. 3/16 in. (4.8 mm)
Steel
Min. 0.020 in. (0.5 mm)

Two models available. *See page 49 in the Stick section for Maxstar 150 S.*

STL: DC TIG/stick with Lift-Arc™ starting without the use of high frequency.

STH: DC TIG/stick with high frequency and Lift-Arc™ starting, plus built-in pulsing with a selection of four fixed-pulse frequencies.

AUTO-LINE Power Management Technology — Allows for any input voltage hook-up (120–240 V) with no manual linking.

Multi-voltage plug (MVP™**)** allows for connection to 120- or 240-volt receptacles without tools. Choose the plug that fits the receptacle and connect it to the power cord. See photo above.

Portable with adjustable shoulder strap. Easy to transport at 13.7 pounds.

Built-in gas solenoid eliminates need for bulky torch with a gas valve.

**Sense voltage for stick and Lift-Arc™ TIG.*

Light industrial ● CC DC 1 Phase

Processes
- TIG (GTAW) ▪ Stick (SMAW)
- Pulsed TIG (GTAW-P) w/STH model

Comes with
- 10 ft. power cord with MVP plugs for 120 V and 240 V
- 13 ft. (4 m) electrode cable with holder and 25 mm Dinse-style connector
- 10 ft. (3 m) work cable with clamp and 25 mm Dinse-style connector

TIG/Stick package includes above plus
- 12.5 ft. (3.8 m) Weldcraft™ A-150 TIG torch (#WP1712RDI25)
- Protective X-CASE™
- Flow gauge regulator with hose
- RCCS-6M remote fingertip control (packages #907 135 017 and #907 136 017 only)
- AK2C TIG torch accessory kit

Visit MillerWelds.com or your distributor for Miller® options and accessories.

DC

Model/Stock Number	Model/Stock Number	Welding Process	Input Power	Welding Amp Range	Rated Output	Amps Input at Rated Output, 50/60 Hz	KVA at Duty Cycle	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
Maxstar 150 STL **(#907 135)** Machine only **(#907 135 016)** TIG/stick package **(#907 135 017)** TIG/stick package with remote fingertip control	**Maxstar 150 STH** **(#907 136)** Machine only **(#907 136 017)** TIG/stick package with remote fingertip control	TIG	115 V	5–150	150 A at 16 V, 30% duty cycle	28.0	3.4	3.1	90 VDC (12–16 VDC*)	H: 9 in. (229 mm) W: 5.5 in. (140 mm) D: 13.25 in. (337 mm)	13.7 lb. (6.2 kg)
			230 V	5–150	150 A at 16 V, 30% duty cycle	14.2	3.2	3.1			
		Stick	115 V	20–100	100 A at 24 V, 35% duty cycle	26.4	3.0	3.0			
			230 V	20–150	150 A at 26 V, 30% duty cycle	21.6	4.9	4.7			

Syncrowave® 210 Series

AC/DC TIG and Stick

See literature no. AD/4.6

Continuing the tradition of innovation through advanced inverter technology for light-industrial and personal users.

Syncrowave 210 Runner TIG/MIG Complete package (#951 616) shown.

WIRELESS REMOTE COMPATIBLE

See page 113

Easy to use.
1) Turn power on.
2) Select the process.
3) Set amperage or voltage based on material thickness.
Then weld! It's easy as 1,2,3.

TIG Welding Capability

Max. 1/4 in. (6.4 mm)

Steel | Aluminum

Min. 0.020 in. (0.5 mm)

AUTO-LINE Power Management Technology — Allows for any input voltage hook-up (120–240 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

Multi-voltage plug (MVP™) allows for connection to 120- or 240-volt receptacles without tools. Choose the plug that fits the receptacle and connect it to the power cord.

Update and expand. Front panel memory card data port provides the ability to easily update software and expand product features.

Low power draw. Inverter-based power source provides full welding output from 240 volts while drawing less than 30 amps.

Pro-Set™ (TIG/stick) eliminates the guesswork when setting weld parameters. Use Pro-Set when you want the speed, convenience and confidence of preset controls.

AC balance (TIG) control provides adjustable oxide removal which is essential for creating the highest quality aluminum welds.

Pulse (TIG). Pulsing can increase puddle agitation, arc stability and travel speeds while reducing heat input and distortion. Expandable feature.

DIG (stick) control allows the arc characteristics to be changed for specific applications and electrodes. Lower the DIG setting for smooth running electrodes like E7018 and increase the DIG setting for stiffer, more penetrating electrodes like E6010.

Auto-Set™ (MIG) automatically sets your welder to the proper parameters. Simply set the wire size, material thickness, and shielding gas and you're ready to weld. (TIG/MIG complete package only.)

Light Industrial ● CC AC/DC 1 Phase

Processes

- AC/DC TIG (GTAW) ▪ DC stick (SMAW)
- Pulsed TIG (GTAW-P) ▪ MIG (GMAW)*
- Flux-cored (FCAW)*

**TIG/MIG Complete package only.*

Comes with

- 10 ft. power cord with MVP plugs for 120 V and 240 V
- 12.5 ft. (3.8 m) Weldcraft™ A-150 TIG torch (#WP1712MFDI50)
- 12 ft. (3.7 m) work cable with clamp and Dinse-style connector
- Electrode holder with Dinse-style connector
- RFCS-14 remote foot control
- Flow gauge regulator with hose
- Factory-installed running gear with EZ-Change™ low cylinder rack

TIG/MIG Complete package comes with above plus

- Spoolmate™ 100 spool gun (#300 371)
- 4-14 pin connector
- Flow-thru Dinse-style connector
- Memory card

Most popular accessories

- 25 ft. (7.6 m) Weldcraft™ A-150 TIG Torch #WP-17-25-R (pg 59)
- Protective Cover #195 142 (pg 112)
- RCC-14 Remote Control #151 086 (pg 112)
- Wireless Remote Foot Control #300 429 (pg 113)
- Memory Card Expansion
  #301 128 DC pulse expansion
  #301 127 AC frequency expansion
- TIG Torch Accessory Kit #AK2C
  Includes one short back cap, one of each size (#4, #5, #6) alumina nozzle, and one of each size (.040, 1/16, 3/32 in.) of the following: collet, collet body, and 7-inch 2% ceriated tungsten electrode.
- TIG Torch Accessory Kit #AK-150MFC
  Allows A-150 torch customization. Converts into 28 different torch styles while using existing cable. Includes collets, collet bodies, nozzles, torch heads, handle and more.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

AC/DC

Stock Number	Input Power	Welding Process	Welding Amperage Range	Rated Output (R.M.S.)	Amps Input at Rated Output	Max. Open-Circuit Voltage	Dimensions	Net Weight
(#907 596) Runner **(#951 616)** Runner TIG/MIG Complete	115 V	DC TIG	5–125 A	95 A at 13.8 V, 60% duty cycle	17.4 (.58 while idling)	47 VDC	H: 31.5 in. (800 mm) W: 18.5 in. (470 mm) D: 43 in. (1092 mm)	Runner package: 133.5 lb. (61 kg) Runner TIG/MIG Complete package: 139.5 lb. (63 kg)
		AC TIG	5–125 A	90 A at 13.6 V, 60% duty cycle	12.4 (.58 while idling)			
		DC stick	20–90 A	70 A at 22.8 V, 60% duty cycle	20.5 (.58 while idling)			
	230 V	DC TIG	5–210 A	125 A at 15 V, 60% duty cycle	11.9 (.35 while idling)			
		AC TIG	5–210 A	114 A at 14.6 V, 60% duty cycle	8.62 (.35 while idling)			
		DC stick	20–150 A	90 A at 23.6 V, 60% duty cycle	11.9 (.35 while idling)			

Maxstar® 210/280 Series

DC TIG and Stick

See literature no. DC/32.1 (210) and DC/35.0 (280)

Dynasty® 210/280 Series

AC/DC TIG and Stick

See literature no. AD/4.81 (210) and AD/4.9 (280)

210 Series TIG Welding Capability

Max. 1/4 in. (6.4 mm)	Max. 1/4 in. (6.4 mm)
Steel	Aluminum (Dynasty only)
Min. 0.002 in. (0.05 mm)	Min. 0.012 in. (0.3 mm)

280 Series TIG Welding Capability

Max. 3/8 in. (9.5 mm)	Max. 3/8 in. (9.5 mm)
Steel	Aluminum (Dynasty only)
Min. 0.004 in. (0.1 mm)	Min. 0.012 in. (0.3 mm)

NEW!

Maxstar and Dynasty 210 Series (Maxstar 210 shown).

Dynasty 280 DX

WIRELESS REMOTE COMPATIBLE

See page 113

Base and DX models available. Base model provides essential TIG and stick functions. DX model adds extended ranges to sequencer, full trigger options, and full preflow and pulser functions.

Note: See page 49 in the Stick section for Maxstar 210 STR.

AUTO-LINE™ Power Management Technology — Allows for any input voltage hook-up (210 models: 120–480 V, 280 models: 208–575 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

Blue Lightning™ high-frequency (HF) arc starter for non-contact arc initiation. Provides more consistent arc starts and greater reliability compared to traditional HF arc starters.

Lift-Arc™ provides AC or DC arc initiation without the use of high frequency.

Hot Start™ adaptive control provides positive arc starts without sticking.

Auto-postflow adjusts the length of postflow time based on the amperage setting, shielding your tungsten and eliminating the need to set the postflow time.

Pro-Set™ eliminates the guesswork when setting weld parameters. Use Pro-Set when you want the speed, convenience and confidence of preset controls. Simply select the feature and adjust until Pro-Set appears on the display.

Sleep timer conserves electricity. This programmable feature will power down the machine if it sits idle for a specified time.

Update and expand. Front panel memory card data port provides the ability to easily update software and expand product features.

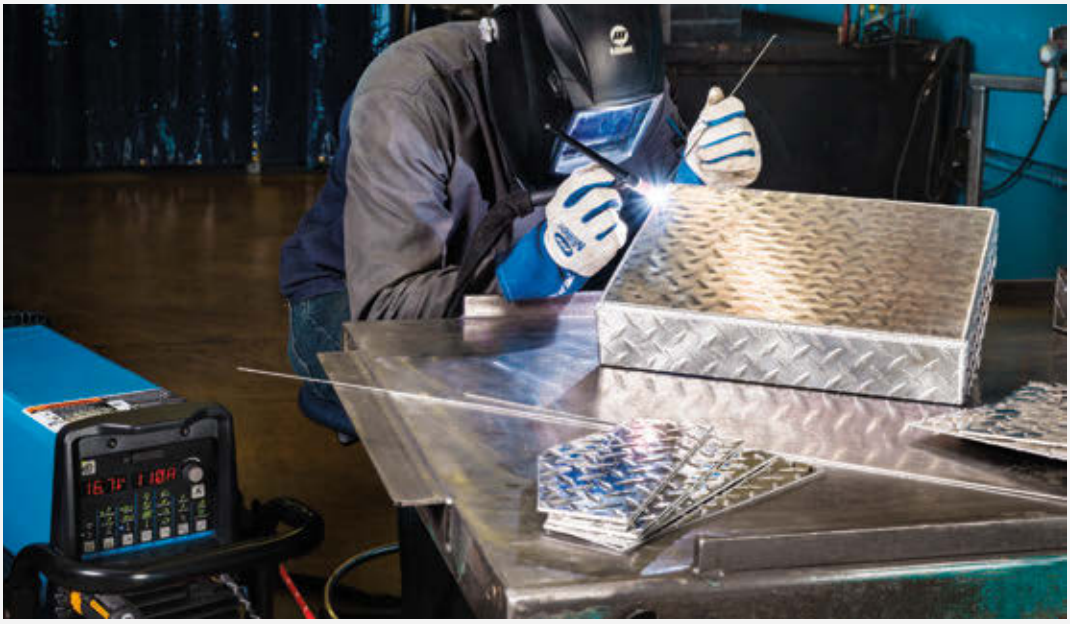
Optional cooler power supply (CPS) is an integrated 120-volt dedicated-use receptacle for the Coolmate™ 1.3. *Not available on Maxstar 210 Series.*

Optional Cooler-On-Demand™ feature operates the auxiliary cooling system only when needed, reducing noise, energy use, and airborne contaminants pulled through the cooler. *Only available on CPS models.*

**Refer to owner's manual for 208-volt output ratings and duty cycle.*
***Sense voltage for low OCV stick and Lift-Arc™ TIG.*

DC Maxstar

Model/ Stock Number	Welding Process	Input Power	Welding Amp Range	Rated Output at 60% Duty Cycle	Amps Input at Rated Load Output, 50/60 Hz 120 V	208 V	230 V	240 V	400 V	460 V	480 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
Maxstar 210 (#907 683) Maxstar 210 DX (#907 684)	TIG	3-phase	1–210	210 A at 18.4 V	–	14	–	12	7	–	6	–	5.2	4.9	80 VDC (11 VDC**)	H: 13.6 in. (346 mm) W: 8.6 in. (219 mm) D: 19.5 in. (495 mm)	38 lb. (17.2 kg)
		1-phase	1–210	210 A at 18.4 V	–	24	–	20	12	–	10	–	4.9	4.9			
		1-phase (120 V)	1–150	125 A at 15 V	22	–	–	–	–	–	–	–	2.6	2.6			
	Stick	3-phase	5–210	160 A at 26.4 V	–	15	–	13	8	–	6	–	5.5	5.2			
		1-phase	5–210	160 A at 26.4 V	–	26	–	22	13	–	11	–	5.3	5.3			
		1-phase (120 V)	5–100	90 A at 23.6 V	23	–	–	–	–	–	–	–	2.8	2.8			
Maxstar 280 (#907 552) (#907 538) with CPS **Maxstar 280 DX (#907 553) (#907 539)** with CPS	TIG	3-phase	1–280	235 A at 19.4 V	–	17	15	–	9	7	–	6	6.2	6.0	60 VDC (11 VDC**)	H: 13.6 in. (346 mm) W: 8.6 in. (219 mm) D: 22.5 in. (569 mm)	47 lb. (21.3 kg) 50 lb. (22.7 kg) with CPS
		1-phase	1–280	235 A at 19.4 V*	–	28	26	–	15	13	–	10	6.0	6.0			
	Stick	3-phase	5–280	200 A at 28 V	–	20	18	–	10	9	–	7	7.2	7.0			
		1-phase	5–280	180 A at 27.2 V*	–	30	27	–	15	13	–	10	6.2	6.2			



Dynasty welders add AC TIG capabilities and the following AC features (limited on base model)

Waveforms for advanced squarewave, soft squarewave, sine wave and triangular wave.

Balance control provides adjustable oxide removal which is essential for creating the highest quality aluminum welds. DX models provide extended ranges.

Frequency controls the width of the arc cone and can improve directional control of the arc.

Dynasty 280 DX with Insight

Designed to deliver Welding Intelligence.™ The Dynasty 280 DX with Insight incorporates Insight Core™ (standard) and Insight Centerpoint™ welding information management systems into its capabilities. These systems help welding operations improve quality, retain weld records, increase productivity and manage costs. See pages 24 and 25 for more information.

Dynasty Water-Cooled Complete Packages

(Additional packages are available – visit MillerWelds.com or your distributor)

Dynasty 280 DX water-cooled complete package (#951 469) shown.

Model	Packages with Foot Control and CPS	Packages with Wireless Foot Control and CPS
Dynasty 210	(#951 666)	(#951 667)
Dynasty 210 DX	(#951 668)	(#951 669)
Dynasty 280	(#951 466)	–
Dynasty 280 DX	(#951 468)	(#951 469)

**Refer to owner's manual for 208-volt output ratings and duty cycle.*
***Sense voltage for low OCV stick and Lift-Arc™ TIG.*

Industrial

CC AC/DC 3 Phase 1 Phase *Maxstar is DC only*

Processes
- TIG (GTAW) • Stick (SMAW)
- Pulsed TIG (GTAW-P)
- Air carbon arc (CAC-A) w/280 models

Comes with
- 8 ft. (2.4 m) power cord (no plug)
- Two 50 mm Dinse-style connectors
- Quick reference guide (Dynasty models only)

Complete packages come with
- 8 ft. (2.4 m) power cord (no plug)
- Quick reference guide (Dynasty models only)
- Small Runner™ cart
- Coolmate™ 1.3
- Coolant (4 one-gallon bottles)
- Remote control (foot or wireless foot)
- Weldcraft™ water-cooled torch kit
  Dynasty 210: W-250 (WP-20)
  Dynasty 280: W-280 (WP-280)

Most popular accessories
- 2-Wheel Trolley Cart #300 971 (pg 107)
- Small Runner™ Cart #301 318 (pg 107)
- Coolmate™ 1.3 #300 972 (pg 107)
- Coolant #043 810 (pg 107)

- **Contractor Kits** (pg 112)
  #301 311 w/RCCS-14 finger control
  #301 309 w/RFCS-14 HD foot control

- **Weldcraft™ Water-Cooled Torch Kits** (pg 112)
  #300 185 W-250 (WP-20)
  #300 990 W-280 (WP-280)
  #301 268 W-375
- Remote Controls (pg 112/113)
  #043 688 RCCS-14 fingertip control
  #194 744 RFCS-14 HD foot control
  #300 429 Wireless foot control

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

AC/DC Dynasty

Model/Stock Number	Welding Process	Input Power	Welding Amp Range	Rated Output at 60% Duty Cycle	Amps Input at Rated Load Output, 50/60 Hz 120 V	208 V	230 V	240 V	400 V	460 V	480 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
Dynasty 210 **(#907 685)** **(#907 685 002)** with CPS **Dynasty 210 DX** **(#907 686)** **(#907 686 002)** with CPS	TIG	3-phase	1–210	210 A at 18.4 V	–	14	–	12	7	–	6	–	5.2	4.9	80 VDC (11 VDC**)	H: 13.6 in. (346 mm) W: 8.6 in. (219 mm) D: 22.5 in. (569 mm)	47 lb. (21.3 kg) 50 lb. (22.7 kg) with CPS
		1-phase	1–210	210 A at 18.4 V	–	24	–	20	12	–	10	–	4.9	4.9			
		1-phase (120 V)	1–150	125 A at 15 V	22	–	–	–	–	–	–	–	2.6	2.6			
	Stick	3-phase	5–210	160 A at 26.4 V	–	15	–	13	8	–	6	–	5.5	5.2			
		1-phase	5–210	160 A at 26.4 V	–	26	–	22	13	–	11	–	5.3	5.3			
		1-phase (120 V)	5–100	90 A at 23.6 V	23	–	–	–	–	–	–	–	2.8	2.8			
Dynasty 280 **(#907 550)** **(#907 537)** with CPS **Dynasty 280 DX** **(#907 551)** **(#907 514)** with CPS **(#907 514 003)** w/Insight and CPS	TIG	3-phase	1–280 (DC) 2–280 (AC)	235 A at 19.4 V	–	19	17	10	9	7	7.0	6.7			60 VDC (11 VDC**)	H: 13.6 in. (346 mm) W: 8.6 in. (219 mm) D: 22.5 in. (569 mm)	52 lb. (23.6 kg) 55 lb. (25 kg) with CPS
		1-phase		235 A at 19.4 V*	–	33	30	17	15	12	6.9	6.8					
	Stick	3-phase	5–280	200 A at 28 V	–	22	20	11	10	8	8.2	7.9					
		1-phase		180 A at 27.2 V*	–	34	31	17	15	12	7.1	7.0					

Maxstar® and Dynasty® 350 and 700

DC (Maxstar) and AC/DC (Dynasty) TIG and Stick

See literature no. DC/24.0 (Maxstar) and AD/5.0 (Dynasty)

Dynasty 350 *Dynasty 700*

WIRELESS REMOTE COMPATIBLE

See page 113

TIG Welding Capability

700 Max. 1 in. (25.4 mm)	700 Max. 1 in. (25.4 mm)
350 Max. 5/8 in. (15.9 mm) Steel	350 Max. 5/8 in. (15.9 mm) Aluminum (Dynasty only)
350 Min. 0.012 in. (0.3 mm)	350 Min. 0.015 in. (0.4 mm)
700 Min. 0.020 in. (0.5 mm)	700 Min. 0.020 in. (0.5 mm)

AUTO-LINE Power Management Technology — Allows for any input voltage hook-up (208–575 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

Blue Lightning™ high-frequency (HF) arc starter for non-contact arc initiation. Provides more consistent arc starts and greater reliability compared to traditional HF arc starters.

Lift-Arc™ provides AC or DC arc initiation without the use of high frequency.

Hot Start™ adaptive control provides positive arc starts without sticking.

Auto-postflow adjusts the length of postflow time based on the amperage setting, shielding your tungsten and eliminating the need to set the postflow time.

120-volt auxiliary power receptacle for cooling system or small tools.

Program memory features nine independent program memories that maintain/save your parameters.

High-speed DC TIG pulse controls capable of 5000 pulses per second.

Dynasty welders add AC TIG capabilities and the following AC features

Waveforms for advanced squarewave, soft squarewave, sine wave and triangular wave.

Balance control provides adjustable oxide removal which is essential for creating the highest quality aluminum welds.

Frequency controls the width of the arc cone and can improve directional control of the arc.

AC amplitude/amperage allows EP and EN amperages to be set independently to precisely control heat input to the work and electrode.

Dynasty 350 package (#951 627) shown.

*Sense voltage for low OCV stick and Lift-Arc™ TIG.
**See literature no. DC/24.0 and AD/5.0 for Complete package dimensions and weight.

Heavy Industrial

CC AC/DC 3 Phase 1 Phase *Maxstar is DC only*

Processes

- TIG (GTAW) • Stick (SMAW)
- Pulsed TIG (GTAW-P)
- Air carbon arc (CAC-A)

350 models come with

- 8 ft. (2.4 m) power cord (no plug)
- Two 50 mm Dinse-style connectors (350)
- Setup video and reference guide

700 models come with

- Thread-lock torch connector
- Two thread-lock weld cable connectors
- Setup video and reference guide

Note: Power cord is NOT included with 700 models.

Complete packages come with above plus

- Runner™ cart
- Coolmate™ 3.5
- Coolant (4 one-gallon bottles)
- Remote control (foot or wireless foot)
- Weldcraft™ water-cooled torch kit (350: W-375, 700: W-400)

Most popular accessories

- Runner™ Cart #300 244 (pg 107)
- Coolmate™ 3.5 #300 245 (pg 107)
- Coolant #043 810 (pg 107)

- **Weldcraft™ Water-Cooled Torch Kits** (pg 112)
  - #300 185 W-250 (WP-20)
  - #300 990 W-280 (WP-280)
  - #301 268 W-375
  - #300 186 W-400 (WP-18SC)
- Remote Controls (pg 112/113)
  - #043 688 RCCS-14 fingertip control
  - #194 744 RFCS-14 HD foot control
  - #300 429 Wireless foot control

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

	Model/Stock Number	Welding Process	Input Power	Welding Amp Range	Rated Output	Amps Input at Rated Load Output, 50/60 Hz 208 V	230 V	400 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions**	Net Weight**
DC Maxstar	**Maxstar 350** **(#907 334)** Machine only **(#951 624)** Complete w/foot **(#951 625)** Complete w/wireless foot	TIG/ stick	3-phase	3–350	300 A at 32 V, 60% duty cycle	33	30	17	15	12	12.0	11.5	75 VDC (10–15 VDC*)	H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)	135 lb. (61 kg)
			1-phase	3–350	225 A at 29 V, 60% duty cycle	41	37	–	19	15	8.6	8.2			
	Maxstar 700 **(#907 103)** Machine only	TIG/ stick	3-phase	5–700	600 A at 44 V, 60% duty cycle	89	80	46	40	32	32	31	75 VDC (10–15 VDC*)	H: 34.5 in. (876 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)	198 lb. (90 kg)
			1-phase	5–700	450 A at 38 V, 60% duty cycle	106	96	–	48	38	22	21			
AC/DC Dynasty	**Dynasty 350** **(#907 204)** Machine only **(#951 626)** Complete w/foot **(#951 627)** Complete w/wireless foot	TIG/ stick	3-phase	3–350	300 A at 32 V, 60% duty cycle	35	32	16	16	13	12.7	12.1	60 VDC (11 VDC*)	H: 24.75 in. (629 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)	135 lb. (61 kg)
			1-phase	3–350	225 A at 29 V, 60% duty cycle	47	43	–	21	17	9.8	9.1			
	Dynasty 700 **(#907 101)** Machine only **(#951 403)** Complete w/foot **(#951 404)** Complete w/wireless foot	TIG/ stick	3-phase	5–700	600 A at 44 V, 60% duty cycle	97	88	51	44	35	35	34	75 VDC (10–15 VDC*)	H: 34.5 in. (876 mm) W: 13.75 in. (349 mm) D: 22 in. (559 mm)	198 lb. (90 kg)
			1-phase	5–700	450 A at 38 V, 60% duty cycle	115	104	–	52	42	24	22			

Syncrowave® 250 DX and 350 LX

AC/DC TIG and Stick

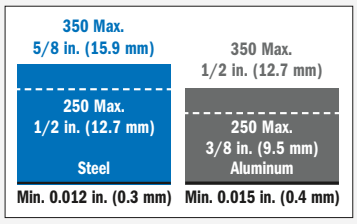
See literature no. AD/4.2

The world's first conventional squarewave TIG power source with decades of proven performance.

Syncrowave 250 machine only

Syncrowave 350 Complete package

TIG Welding Capability



WIRELESS REMOTE COMPATIBLE

See page 113

Squarewave output with AC balance control features adjustable cleaning action while increasing arc stability on various aluminum alloys, and helps eliminate tungsten spitting and arc rectification.

120-volt auxiliary power receptacle for cooling system or small tools.

Syncro Start™ allows the choice of soft, medium, or hot TIG starts based on the tungsten size and application.

HF arc starting for non-contact arc initiation that reduces tungsten and material contamination.

Dual digital meters allow for quick and easy viewing of actual and preset values of amperage and voltage.

Adjustable postflow of 0 to 50 seconds protects the electrode and area near the termination of the weld.

Coolmate™ **3CS cooler** (shown in Complete package). Three-gallon cooling system features a flow indicator to visually indicate system is working and an external filter to stop objects from entering the water-cooled torch cable.

Last procedure recall automatically recalls the last procedure setup when switching polarity.

Line voltage compensation keeps power source constant regardless of fluctuations in input power (±10 percent).

Lift-Arc™ provides DC arc initiation without the use of high frequency.

Heavy industrial ● CC AC/DC 1 Phase

Processes

- TIG (GTAW) • Stick (SMAW)
- Pulsed TIG (GTAW-P) (optional on 250 DX)
- Air carbon arc (CAC-A)

Comes with

- Two 50 mm Dinse-style connectors

Note: Power cord is NOT included.

Complete packages come with

- No. 37 running gear
- Coolmate™ 3CS cooler
- Coolant (four gallons)
- 25 ft. (7.6 m) water-cooled torch with Dinse-style connector (Syncrowave 250: Weldcraft™ W-250) (Syncrowave 350: Weldcraft™ W-375)
- 15 ft. (4.6 m) work cable with clamp and Dinse-style connector
- RFCS-14 remote foot control
- Flowmeter regulator with hose
- Torch accessory kit with tungsten
- Cable cover

Note: Power cord is NOT included.

Most popular accessories

- Wireless Remote Foot Control #300 429 (pg 113)
- Pulser Module #300 548 (250 DX ONLY, standard on 350 LX) For welding thin materials. Provides a heating and cooling effect of the weld puddle to reduce heat input and control distortion of the material. Provides 0.25 to 10 pulses per second.
- Sequencer Module #300 547 (250 DX/350 LX) Provides a starting current higher or lower than the welding current. Provides final slope and final current for trailing the weld. Provides a spot timer for TIG spot application.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

**See literature no. AD/4.2 for Complete package dimensions and weight.*

AC/DC

Model/Stock Number *(Additional packages are available – visit MillerWelds.com or your distributor)*	Welding Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz 200 V	230 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions*	Net Weight*
Syncrowave 250 DX **(#907 194)** 200/230/460 V, 50/60 Hz, Machine only **(#907 195)** 230/460/575 V, 50/60 Hz, Machine only **(#951 117)** 200/230/460 V, 50/60 Hz, Complete **(#951 118)** 230/460/575 V, 50/60 Hz, Complete	3-310	200 A at 28 V, 60% duty cycle	–	77	38	31	17.6	8.6	80 VDC	H: 36.25 in. (921 mm) W: 22.5 in. (572 mm) D: 25 in. (635 mm)	378 lb. (172 kg)
		250 A at 30 V, 40% duty cycle	110	96	48	38	22	11.8			
Syncrowave 350 LX **(#907 198)** 200/230/460 V, 50/60 Hz, Machine only **(#907 199)** 230/460/575 V, 50/60 Hz, Machine only **(#951 622)** 200/230/460 V, 50/60 Hz, Complete **(#951 623)** 230/460/575 V, 50/60 Hz, Complete	3-400	300 A at 32 V, 60% duty cycle	–	110	55	42	25	10.6	80 VDC	H: 36.25 in. (921 mm) W: 22.5 in. (572 mm) D: 25 in. (635 mm)	496 lb. (225 kg)
		350 A at 34 V, 40% duty cycle	146	128	65	50	29.5	13.7			

TIG Torches | AIR-COOLED

Synonymous with versatility and performance, Weldcraft TIG torches can handle the most intricate to the most demanding TIG welding challenges. From 125-amp hand-held MicroTIG® torches to 900-amp machine-held water-cooled models, there's a Weldcraft torch for nearly every TIG application.

For more detailed information, visit
MillerWelds.com/tigtorches

Weldcraft™ A-80 Series

Formerly known as WP-24 Series

See literature no. AY/21.0

A-80 (WP-24) *A-80 Flex (WP-24F)* *A-80 Flex Valve (WP-24FV)*

Innovative air-cooled torches designed for intricate welding applications, especially in limited-access areas and on thin-gauge materials.

Featherweight torch body is well balanced to improve operator comfort and control.

Minimize discontinuities. Insulating gasket on torch body minimizes gas leakage and minimizes weld discontinuities.

Easy gas-flow adjustment using the fingertip gas valve (A-80 Flex Valve).

Flexible neck can be adjusted in any direction to facilitate welding in difficult joints (A-80 Flex).

Combining the flexible neck and gas valve is ideal for optimal positioning and gas flow control (A-80 Flex Valve).

Most popular consumables

Collets	
53N16	.040 in. (1.0 mm)
53N14	1/16 in. (1.6 mm)
24C332	3/32 in. (2.4 mm)
Collet Bodies	
53N18	.040 in. (1.0 mm)
53N19	1/16 in. (1.6 mm)
24CB332	3/32 in. (2.4 mm)
Alumina Nozzles	
A53N24	#4, 1/4 in.
A53N25	#5, 5/16 in.
A53N27	#6, 3/8 in.

Most popular accessories

- Collet Body Wrench 53N20

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Rubber 12.5 ft. (3.8 m)	25 ft. (7.6 m)	Type	Rated Output	Electrode Range
A-80	WP-24-12-R	WP-24-25-R	Air-cooled	DC: 80 A at 60% duty cycle AC: 50 A at 60% duty cycle	.020–3/32 in. (0.5–2.4 mm)
A-80 Flex	WP-24F-12-R	WP-24F-25-R			
A-80 Flex Valve	WP-24FV-12-R	WP-24FV-25-R			

Weldcraft™ A-125 Series

Formerly known as WP-9 Series

See literature no. AY/22.0

A-125 (WP-9) *A-125 Flex Valve (WP-9FV)* *A-125 Pencil (WP-9P)*

Air-cooled torches designed for optimal control while welding thin-gauge materials, especially in hard-to-reach places.

The lightweight body reduces fatigue and downtime, and increases operator comfort.

Perfected control. The gas valve in the A-125 Valve offers improved shielding gas control.

Flexibility. Using the A-125 Flex, the flexible neck easily adjusts to any angle for improved torch control.

The pencil-style model without a back cap allows for superior access to confined areas (A-125 Pencil).

Combine the flexible neck and gas valve for welding limited-access joints using power sources without gas solenoids (A-125 Flex Valve).

For maximum versatility on multiple welding applications, without adding expenses, use the A-125 Flex Redhead and A-125 Flex Valve Redhead.

Most popular consumables

Collets	
13N22	1/16 in. (1.6 mm)
13N23	3/32 in. (2.4 mm)
13N24	1/8 in. (3.2 mm)
Collet Bodies	
13N27	1/16 in. (1.6 mm)
13N28	3/32 in. (2.4 mm)
13N29	1/8 in. (3.2 mm)
Alumina Nozzles	
13N10	#6, 3/8 in.
13N11	#7, 7/16 in.
13N12	#8, 1/2 in.

Most popular accessories

- Accessory Kit #AK1C
  Includes one long back cap, one of each size (#4, #5, #6) alumina nozzle, and one of each size (.040, 1/16 in.) of the following: collet, collet body, and 7-inch 2% ceriated tungsten electrode.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Rubber 12.5 ft. (3.8 m)	Rubber 25 ft. (7.6 m)	2-Piece Rubber 12.5 ft. (3.8 m)	2-Piece Rubber 25 ft. (7.6 m)	Type	Rated Output	Electrode Range
A-125	WP-9-12-R	WP-9-25-R	–	–	Air-cooled	DC: 125 A at 60% duty cycle AC: 100 A at 60% duty cycle	.020–1/8 in. (0.5–3.2 mm)
A-125 Valve	WP-9V-12-R	WP-9V-25-R	WP-9V-12-2	WP-9V-25-2			
A-125 Flex	WP-9F-12-R	WP-9F-25-R	–	–			
A-125 Flex Valve	WP-9FV-12-R	WP-9FV-25-R	WP-9FV-12-2	WP-9FV-25-2			
A-125 Pencil	WP-9P-12-R	WP-9P-25-R	–	–			

Weldcraft™ A-150 Series

Formerly known as WP-17 Series

See literature no. AY/23.0

*PSH = positive stop handle (threaded handle).

Versatile and innovative air-cooled torches designed for maximum comfort in a variety of applications.

Diamond Grip™ head design (A-150 and A-150 Valve) has ergonomic contact points for thumb and fingers. Provides a more comfortable grip and reduces operator fatigue.

Improve control and comfort with the A-150 Flex and the flexible neck that allows access into hard-to-reach areas.

Maximum versatility. Utilize the Redhead™ Series torches in a variety of welding applications without adding expenses.

Ribbed handle and torch design provide cool operation and maximum operator comfort while reducing downtime caused by operator fatigue.

Available with 12.5- or 25-foot, single- or heavy-duty two-piece cable assembly determined by the compatibility of the power source. Heavy-duty cable assembly allows use of a larger conductor for the power cable which simplifies repair and replacement making it ideal for field applications.

Most popular consumables

Collets	
10N23	1/16 in. (1.6 mm)
10N24	3/32 in. (2.4 mm)
10N25	1/8 in. (3.2 mm)
Collet Bodies	
10N31	1/16 in. (1.6 mm)
10N32	3/32 in. (2.4 mm)
10N28	1/8 in. (3.2 mm)
Alumina Nozzles	
10N48	#6, 3/8 in.
10N47	#7, 7/16 in.
10N46	#8, 1/2 in.

Most popular accessories

- **Accessory Kit** #AK-150MFC

Allows A-150 torch customization. Converts into 28 different torch styles while using existing cable. Includes collets, collet bodies, nozzles, torch heads, handle and more.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Rubber 12.5 ft. (3.8 m)	Rubber 25 ft. (7.6 m)	Mono-Flex™ 12.5 ft. (3.8 m)	Mono-Flex™ 25 ft. (7.6 m)	2-Piece Rubber 12.5 ft. (3.8 m)	2-Piece Rubber 25 ft. (7.6 m)	Type	Rated Output	Electrode Range
A-150	WP-17-12-R	WP-17-25-R	WP-17-12-MF	WP-17-25-MF	WP-17-12-2	WP-17-25-2	Air-cooled	DC: 150 A at 60% duty cycle AC: 115 A at 60% duty cycle	.020–1/8 in. (0.5–3.2 mm)
A-150 Valve	WP-17V-12-R	WP-17V-25-R	WP-17V-12-MF	WP-17V-25-MF	WP-17V-12-2	WP-17V-25-2			
A-150 Flex	WP-17F-12-R	WP-17F-25-R	–	–	WP-17F-12-2	WP-17F-25-2			
A-150 Flex Valve	WP-17FV-12-R	WP-17FV-25-R	–	–	WP-17FV-12-2	WP-17FV-25-2			
A-150 Flex Valve Redhead	WP-R17FV-12-R	WP-R17FV-25-R	–	–	–	–			
A-150 PSH*	–	WP-17-25-R-PSH	–	–	WP-17-12-2-PSH	WP-17-25-2-PSH			
A-150 Valve PSH*	WP-17V-12-R-PSH	WP-17V-25-R-PSH	–	–	–	WP-17V-25-2-PSH			

Weldcraft™ A-200 Series

Formerly known as WP-26 Series

See literature no. AY/24.0

Dependable, top-performing air-cooled torches designed for heavy-duty welding applications.

Eliminate the expense of a water-cooled system. The air-cooled capability pairs reliability with cost-effectiveness for all field applications.

Robust performance. The heavy copper construction delivers maximum welding capacity for rugged fieldwork.

Effortless adjustments. The A-200 Valve provides a gas control valve to ensure a quick, easy adjustment of shielding gas flow.

Flexibility. Using the A-200 Flex, the flexible neck easily adjusts to any angle for better torch control in limited-access joints.

Combining the flexible neck and gas valve advances capabilities with greater comfort and control (A-200 Flex Valve).

Maximum versatility. Utilize the Redhead Series torches in a variety of welding applications without adding expenses.

Most popular consumables

Collets	
10N23	1/16 in. (1.6 mm)
10N24	3/32 in. (2.4 mm)
10N25	1/8 in. (3.2 mm)
Collet Bodies	
10N31	1/16 in. (1.6 mm)
10N32	3/32 in. (2.4 mm)
10N28	1/8 in. (3.2 mm)
Alumina Nozzles	
10N47	#7, 7/16 in.
10N46	#8, 1/2 in.
10N45	#10, 5/8 in.

Most popular accessories

- **Accessory Kit** #AK3C

Includes one short back cap, one of each size (#5, #6, #8) alumina nozzle, and one of each size (1/16, 3/32, 1/8 in.) of the following: collet, collet body, and 7-inch 2% ceriated tungsten electrode.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Rubber 12.5 ft. (3.8 m)	Rubber 25 ft. (7.6 m)	2-Piece Rubber 25 ft. (7.6 m)	Type	Rated Output	Electrode Range
A-200	WP-26-12-R	WP-26-25-R	WP-26-25-2	Air-cooled	DC: 200 A at 60% duty cycle AC: 150 A at 60% duty cycle	.020–5/32 in. (0.5–4.0 mm)
A-200 Valve	WP-26V-12-R	WP-26V-25-R	WP-26V-25-2			
A-200 Flex	–	WP-26F-25-R	WP-26F-25-2			
A-200 Flex Valve	WP-26FV-12-R	WP-26FV-25-R	WP-26FV-25-2			
A-200 Flex Redhead	WP-R26F-12-R	–	WP-R26F-25-2			
A-200 Flex Valve Redhead	–	WP-R26FV-25-R	–			

Weldcraft™ W-125 Micro Series

Formerly known as WP-125 Series

See literature no. AY/25.0

W-125 Medium (3.5 in.) Micro (WP-125M)

W-125 Long (5 in.) Micro (WP-125L)

Water-cooled MicroTig® torches designed for limited-access joints.

Low-profile nozzle fits into holes as small as 5/8-inch diameter.

45-degree, 90-degree, and 180-degree options improve access in tight areas.

Lower maintenance costs incurred with the replaceable silicone rubber insulator and head components.

Model	Braided Rubber 25 ft. (7.6 m)	Vinyl 25 ft. (7.6 m)	Type	Rated Output	Electrode Range
W-125 Medium Micro	WP-125M-25-R	WP-125M-25	Water-cooled	DC: 125 A at 100% duty cycle AC: 80 A at 100% duty cycle	.040–3/32 in. (1.0–2.4 mm)
W-125 Long Micro	WP-125L-25-R	WP-125L-25			

Most popular consumables

90° Chucks	
125C40-90	.040 in. (1.0 mm)
125C116-90	1/16 in. (1.6 mm)
125C332-90	3/32 in. (2.4 mm)
90° Glass Nozzles	
125N90	All sizes

Other nozzles are available.

Most popular accessories

- Chuck Wrench 53N20

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Weldcraft™ W-180

Formerly known as WP-24W

See literature no. AY/26.0

One of the smallest water-cooled TIG torches on the market and designed for welding in confined areas that require high amperage.

Use high amperage in confined areas for efficient welding.

Superior maneuverability in limited-access locations with the compact torch body.

Excellent weld capacity without increasing torch size, due to the efficient cooling system.

Comfort and control are increased with the light, well-balanced body design.

Model	Braided Rubber 25 ft. (7.6 m)	Vinyl 25 ft. (7.6 m)	Type	Rated Output	Electrode Range
W-180	WP-24W-25-R	WP-24W-25	Water-cooled	DC: 180 A at 100% duty cycle, AC: 115 A at 100% duty cycle	.020–3/32 in. (0.5–2.4 mm)

Most popular consumables

Collets	
53N16	.040 in. (1.0 mm)
53N14	1/16 in. (1.6 mm)
24C332	3/32 in. (2.4 mm)
Collet Bodies	
53N18	.040 in. (1.0 mm)
53N19	1/16 in. (1.6 mm)
24CB332	3/32 in. (2.4 mm)
Alumina Nozzles	
A53N24	#4, 1/4 in.
A53N25	#5, 5/16 in.
A53N27	#6, 3/8 in.

Most popular accessories

- Collet Body Wrench 53N20

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Weldcraft™ W-200 Pencil Flex

Formerly known as WP-25

See literature no. AY/27.0

Versatile water-cooled torch optimized for use in limited-access welding situations.

Pencil-style, flexible neck designed for both high-amperage applications and confined area access.

Decreased downtime and longer trouble-free service due to overheating with the innovative cooling design.

Comfort and control are increased with the light, well-balanced body design.

Model	Braided Rubber 25 ft. (7.6 m)	Vinyl 25 ft. (7.6 m)	Type	Rated Output	Electrode Range
W-200 Pencil Flex	WP-25-25-R	WP-25-25	Water-cooled	DC: 200 A at 100% duty cycle, AC: 140 A at 100% duty cycle	.020–1/8 in. (0.5–3.2 mm)

Most popular consumables

Collets	
13N21	.040 in. (1.0 mm)
13N22	1/16 in. (1.6 mm)
13N23	3/32 in. (2.4 mm)
Collet Bodies	
13N26	.040 in. (1.0 mm)
13N27	1/16 in. (1.6 mm)
13N28	3/32 in. (2.4 mm)
Alumina Nozzles	
13N09	#5, 5/16 in.
13N10	#6, 3/8 in.
13N11	#7, 7/16 in.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Weldcraft™ W-225 Pencil

Formerly known as WP-20P

See literature no. AY/28.0

Water-cooled torch designed for long-term, trouble-free service with consistent welding performance in general applications.

Extend torch life and minimize downtime due to overheating with the efficient around-the-head cooling design.

Pencil-style head allows for greater access into hard-to-reach joints.

Comfort and control are increased with the lightweight, compact body design.

Model	Vinyl – 25 ft. (7.6 m)	Type	Rated Output	Electrode Range
W-225 Pencil	WP-20P-25	Water-cooled	DC: 225 A at 100% duty cycle, AC: 160 A at 100% duty cycle	.020–1/8 in. (0.5–3.2 mm)

Weldcraft™ W-250 Series

Formerly known as WP-20 Series

See literature no. AY/29.0

W-250 (WP-20)

W-250 Valve (WP-20V)

Water-cooled torch provides consistent performance and long-term trouble-free service with around-the-head water cooling.

Extend torch life and minimize downtime due to overheating with the efficient around-the-head cooling design.

Comfort and control are increased with the lightweight, compact body design.

Reduce leakage of gas and water through secure mechanical fittings and connections.

Easy hose replacement with the innovative mechanical fittings design (W-250 Valve).

Model	Braided Rubber 12.5 ft. (3.8 m)	Braided Rubber 25 ft. (7.6 m)	Vinyl 25 ft. (7.6 m)	Type	Rated Output	Electrode Range
W-250	WP-20-12-R	WP-20-25-R	WP-20-25	Water-cooled	DC: 250 A at 100% duty cycle AC: 180 A at 100% duty cycle	.020–1/8 in. (0.5–3.2 mm)
W-250 Valve	–	–	WP-20V-25			

Most popular consumables

Insulator (non-gas lens and gas lens)	
598882	Required
Collets (non-gas lens and gas lens)	
13N20	.020 (0.5 mm)
13N21	.040 in. (1.0 mm)
13N22	1/16 in. (1.6 mm)
13N23	3/32 in. (2.4 mm)
13N24	1/8 in. (3.2 mm)
Collet Bodies	
13N25	.020 in. (0.5 mm)
13N26	.040 in. (1.0 mm)
13N27	1/16 in. (1.6 mm)
13N28	3/32 in. (2.4 mm)
13N29	1/8 in. (3.2 mm)
Gas Lens	
45V41	.020 in. (0.5 mm)
45V42	.040 in. (1.0 mm)
45V43	1/16 in. (1.6 mm)
45V44	3/32 in. (2.4 mm)
45V45	1/8 in. (3.2 mm)
Alumina Nozzles	
13N08	#4, 1/4 in.
13N09	#5, 5/16 in.
13N10	#6, 3/8 in.
13N11	#7, 7/16 in.
13N12	#8, 1/2 in.
13N13	#10, 5/8 in.
53N58	#4, 1/4 in. (gas lens)
53N59	#5, 5/16 in. (gas lens)
53N60	#6, 3/8 in. (gas lens)
53N61	#7, 7/16 in. (gas lens)
53N61S	#8, 1/2 in. (gas lens)
W-250 Series Back Caps	
41V33	Short
41V35	Medium
41V24	Long

Most popular accessories

- **Cable Covers**
  #WC-3-10 10 ft. (3 m)
  #WC-3-22 22 ft. (6.7 m)

- **Accessory Kit** #AK4C
  Includes one long back cap, one of each size (#5, #6, #7) alumina nozzle, and one of each size (1/16, 3/32, 1/8 in.) of the following: collet, collet body, and 7-inch 2% ceriated tungsten electrode.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Weldcraft™ W-280 Super Cool™

Formerly known as WP-280

See literature no. AY/30.0

Reliable water-cooled torch designed for demanding, high-amperage applications.

Super Cool technology provides additional surface area to increase cooling efficiency and capacity.

Reduce downtime due to overheating through consistent water-cooled performance.

Extend torch life with dependable water-cooled technology.

Reduce leakage of gas and water through secure mechanical fittings and connections.

Model	Braided Rubber 12.5 ft. (3.8 m)	25 ft. (7.6 m)	50 ft. (15.2 m)	Braided Rubber with 50 mm Dinse 25 ft. (7.6 m)	Type	Rated Output	Electrode Range
W-280 Super Cool	#301 251 012	#301 251 025	#301 251 050	#301 251 001	Water-cooled	DC: 280 A at 100% duty cycle AC: 195 A at 100% duty cycle	.020–1/8 in. (0.5–3.2 mm)

Weldcraft™ W-375 Super Cool™

See literature no. AY/32.5

Reliable water-cooled torch designed for demanding, high-amperage applications.

Super Cool technology provides additional surface area to increase cooling efficiency and capacity.

Reduce downtime due to overheating through consistent water-cooled performance.

Extend torch life with dependable water-cooled technology.

Reduce leakage of gas and water through secure mechanical fittings and connections.

Model	Braided Rubber 12.5 ft. (3.8 m)	25 ft. (7.6 m)	Braided Rubber with 50 mm Dinse 25 ft. (7.6 m)	Type	Rated Output	Electrode Range
W-375 Super Cool	#301 253 012	#301 253 025	#301 253 001	Water-cooled	DC: 375 A at 100% duty cycle AC: 265 A at 100% duty cycle	.020–1/8 in. (0.5–3.2 mm)

Most popular consumables

Insulator (non-gas lens and gas lens)	
598882	Required
Collets (non-gas lens and gas lens)	
13N20	.020 (0.5 mm)
13N21	.040 in. (1.0 mm)
13N22	1/16 in. (1.6 mm)
13N23	3/32 in. (2.4 mm)
13N24	1/8 in. (3.2 mm)
Collet Bodies	
13N25	.020 in. (0.5 mm)
13N26	.040 in. (1.0 mm)
13N27	1/16 in. (1.6 mm)
13N28	3/32 in. (2.4 mm)
13N29	1/8 in. (3.2 mm)
Gas Lens	
45V41	.020 in. (0.5 mm)
45V42	.040 in. (1.0 mm)
45V43	1/16 in. (1.6 mm)
45V44	3/32 in. (2.4 mm)
45V45	1/8 in. (3.2 mm)
Alumina Nozzles	
13N08	#4, 1/4 in.
13N09	#5, 5/16 in.
13N10	#6, 3/8 in.
13N11	#7, 7/16 in.
13N12	#8, 1/2 in.
13N13	#10, 5/8 in.
53N58	#4, 1/4 in. (gas lens)
53N59	#5, 5/16 in. (gas lens)
53N60	#6, 3/8 in. (gas lens)
53N61	#7, 7/16 in. (gas lens)
53N61S	#8, 1/2 in. (gas lens)
Back Caps	
41V33	Short
41V35	Medium
41V24	Long

Most popular accessories

- **Cable Covers**
  #WC0183 11.75 ft. (3.6 m)
  #WC0182 24.25 ft. (7.4 m)

- **Accessory Kit** #AK4C
  Includes one long back cap, one of each size (#5, #6, #7) alumina nozzle, and one of each size (1/16, 3/32, 1/8 in.) of the following: collet, collet body, and 7-inch 2% ceriated tungsten electrode.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Weldcraft™ W-350 Series

Formerly known as WP-18 Series

See literature no. AY/32.0

W-350 (WP-18)

W-350 Valve (WP-18V)

Rugged water-cooled torches engineered for high-amperage and continuous hand-held welding in mechanized applications.

Reduce downtime and costs by minimizing overheating with the unique cooling design engineered for operator comfort.

Reduce discomfort and fatigue using the comfortable handle design.

Superior gas flow control offered through the built-in fingertip gas control (W-350 Valve).

Most popular consumables

Collets	
10N24	3/32 in. (2.4 mm)
10N25	1/8 in. (3.2 mm)
54N20	5/32 in. (4.0 mm)
Collet Bodies	
10N32	3/32 in. (2.4 mm)
10N28	1/8 in. (3.2 mm)
406488	5/32 in. (4.0 mm)
Alumina Nozzles	
10N48	#6, 3/8 in.
10N47	#7, 7/16 in.
10N46	#8, 1/2 in.
10N45	#10, 5/8 in.
10N44	#12, 3/4 in.

Most popular accessories

- Accessory Kit #MAK-2S

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Rubber 12.5 ft. (3.8 m)	Rubber 25 ft. (7.6 m)	Vinyl 12.5 ft. (3.8 m)	Vinyl 25 ft. (7.6 m)	Type	Rated Output	Electrode Range
W-350	**WP-18-12-R**	**WP-18-25-R**	**WP-18-12**	**WP-18-25**	Water-cooled	DC: 350 A at 100% duty cycle AC: 250 A at 100% duty cycle	.020–5/32 in. (0.5–4.0 mm)
W-350 Valve	–	**WP-18V-25-R**	–	**WP-18V-25**			

Weldcraft™ W-400 Super Cool™

Formerly known as WP-18SC

See literature no. AY/33.0

Water-cooled torch designed to endure some of the most demanding applications while minimizing overheating.

Extend torch and consumable life with the full-flow water chamber that provides around-the-head cooling.

Improve gas coverage and cooling capacity with gas lens usage with heavy-duty stubby collet body.

Extend parts life using the durable copper components, maximizing current capacity.

Comfort and maximum torch control with the textured handle.

Most popular consumables

Heavy-Duty Collets	
10N25HD	1/8 in. (3.2 mm)
54N20HD	5/32 in. (4.0 mm)
18C36	3/16 in. (4.8 mm)
Heavy-Duty Nose Collet Body	
NCB-36	All sizes
Alumina Nozzles	
54N16	#6, 3/8 in.
54N15	#7, 7/16 in.
54N14	#8, 1/2 in.
Back Caps	
57Y04	Short
300M	Medium

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Rubber 12.5 ft. (3.8 m)	Rubber 25 ft. (7.6 m)	Vinyl 25 ft. (7.6 m)	Type	Rated Output	Electrode Range
W-400 Super Cool	**WP-18SC-12-R**	**WP-18SC-25-R**	**WP-18SC-25**	Water-cooled	DC: 400 A at 100% duty cycle, AC: 280 A at 100% duty cycle	.020–3/16 in. (0.5–4.8 mm)

Weldcraft™ W-410

Formerly known as CS410

See literature no. AY/34.0

Water-cooled torch that increases amperage output without increasing torch size. Designed for demanding applications.

Simplify torch package installation with ColorSmart™ hose and cable sets that differentiate input water, water/power cable, and gas hoses.

D-Handle™ design features a self-indexing flat top that allows for torch orientation by feel.

Work in cold weather with the Tri-Flex™ hose and cable assembly that remains flexible to ease handling and extends cable life.

Improve high-frequency shielding and minimize gas leakages with the double-lip back cap seal.

Most popular consumables

Collets	
10N24	3/32 in. (2.4 mm)
10N25	1/8 in. (3.2 mm)
54N20	5/32 in. (4.0 mm)
Collet Bodies	
10N32	3/32 in. (2.4 mm)
10N28	1/8 in. (3.2 mm)
406488	5/32 in. (4.0 mm)
Alumina Nozzles	
10N46	#8, 1/2 in.
10N45	#10, 5/8 in.
10N44	#12, 3/4 in.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Braided Rubber – 25 ft. (7.6 m)	Type	Rated Output	Electrode Range
W-410	**CS410-25**	Water-cooled	DC: 410 A at 100% duty cycle, AC: 310 A at 100% duty cycle	.020–5/32 in. (0.5–4.0 mm)

Weldcraft™ W-500

Formerly known as WP-12

See literature no. AY/35.0

Dependable water-cooled torch designed for high-capacity, demanding applications.

Comfort and reduced downtime due to the sealed water chamber that minimizes torch overheating.

Heavy-duty components provide reliable welding performance, even after continuous and demanding use.

100-percent-copper construction ensures maximum thermal conductivity.

Most popular consumables

Insulator	
12NG	Required
Collets	
85Z17	5/32 in. (4.0 mm)
85Z18	3/16 in. (4.8 mm)
85Z19	1/4 in. (6.4 mm)
Collet Body	
11WP65	All sizes
Alumina Nozzles	
14N59	#6, 3/8 in.
14N60	#7, 7/16 in.
14N61	#8, 1/2 in.
14N61-10	#10, 5/8 in.
14N61-12	#12, 3/4 in.
Back Caps	
56Y45	Short
56Y44	Long

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Rubber – 25 ft. (7.6 m)	Type	Rated Output	Electrode Range
W-500	WP-12-25	Water-cooled	DC: 500 A at 100% duty cycle, AC: 350 A at 100% duty cycle	1/16–1/4 in. (1.6–6.4 mm)

Weldcraft™ Modular Series

See literature no. AY/36.0

A-150 Modular (WP-150)

A-150 Modular Valve (WP-150V)

A-200 Modular Valve (WP-200V)

W-225 Modular (WP-225)

Air-cooled and water-cooled torches engineered to weld multiple joint configurations for various applications and angles.

Built-in, efficient cooling system reduces overheating to extend parts and consumable life.

Modular design minimizes costs and downtime for torch changeover and parts inventory.

Easy configurable head options provide greater flexibility and joint access, and minimize downtime for torch changeover.

Gas valve provides greater shielding gas flow control (A-150 Modular Valve and A-200 Modular Valve).

**Ratings are torch head dependent.*

Most popular accessories

- **Accessory Kit #AK-150MFC**
  Allows A-150 torch customization. Converts into 28 different torch styles while using existing cable. Includes collets, collet bodies, nozzles, torch heads, handle and more.

- **Accessory Kit #AK-225MFC**
  Supplements W-225 torch packages. Includes five additional torch heads, collets, collet bodies, nozzles, handle and more.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Rubber 12.5 ft. (3.8 m)	Rubber 25 ft. (7.6 m)	2-Piece Rubber 12.5 ft. (3.8 m)	2-Piece Rubber 25 ft. (7.6 m)	Type	Rated Output*	Electrode Range*
A-150 Modular	WP-150-12-R	WP-150-25-R	WP-150-12-2	WP-150-25-2	Air-cooled	DC: 150 A at 60% duty cycle AC: 105 A at 60% duty cycle	.020–1/8 in. (0.5–3.2 mm)
A-150 Modular Valve	WP-150V-12-R	WP-150V-25-R	WP-150V-12-2	–			
A-200 Modular Valve	WP-200V-12-R	WP-200V-25-R	–	–	Air-cooled	DC: 200 A at 60% duty cycle AC: 150 A at 60% duty cycle	.020–5/32 in. (0.5–4.0 mm)

Model	Braided Rubber 12.5 ft. (3.8 m)	Braided Rubber 25 ft. (7.6 m)	Vinyl 12.5 ft. (3.8 m)	Vinyl 25 ft. (7.6 m)	Type	Rated Output*	Electrode Range*
W-225 Modular	WP-225-12-R	WP-225-25-R	–	WP-225-25	Water-cooled	DC: 225 A at 100% duty cycle AC: 160 A at 100% duty cycle	.020–5/32 in. (0.5–4.0 mm)

Weldcraft™ Automation Series

See literature no. AY/37.0

Air-cooled and water-cooled torches designed for high- and low-amperage mechanized applications.

Minimize downtime associated with tungsten changeover by using the front or back tungsten loading areas.

Pencil-style model offers outstanding durability on mechanized applications (W-500 Pencil Automation).

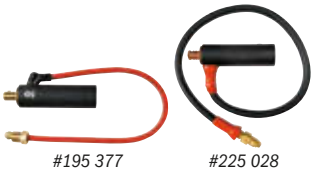
Built-in gas lens improves gas coverage to minimize shielding gas turbulence and improve weld quality (W-500A Automation, W-500B Automation).

Handle the most demanding high-amperage applications with the W-900 Automation torch.

Most popular accessories

- **Cable Covers**
  #WC-3-10 10 ft. (3 m)
  #WC-3-22 22 ft. (6.7 m)
  #WC-4-10 10 ft. (3 m)
  #WC-4-22 22 ft. (6.7 m)

- **Air-Cooled Torch 1-Piece Power Cable Connector** (pg 113)
  #195 378 50 mm Dinse-style



#195 377 *#225 028*

- **Water-Cooled Torch 1-Piece Power Cable Connectors** (pg 113)
  #195 377 50 mm Dinse-style
  #225 028 50 mm thread-lock

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model	Rubber 12.5 ft. (3.8 m)	25 ft. (7.6 m)	2-Piece Rubber 12.5 ft. (3.8 m)	Type	Rated Output	Electrode Range
A-150 Automation	**WP-23A-12-R**	**WP-23A-25-R**	**WP-23A-12-2**	Air-cooled	DC: 150 A at 60% duty cycle AC: 120 A at 60% duty cycle	.040–3/32 in. (1.0–2.4 mm)

Model	3 ft. (0.9 m)	6 ft. (1.8 m)	12.5 ft. (3.8 m)	25 ft. (7.6 m)	Type	Rated Output	Electrode Range
W-250 Automation	**WP-22A-3** (Vinyl)	**WP-22A-6** (Vinyl)	**WP-22A-12** (Vinyl)	**WP-22A-25-R** (Rubber) **WP-22A-25** (Vinyl)	Water-cooled	DC: 250 A at 100% duty cycle AC: 180 A at 100% duty cycle	.040–1/8 in. (1.0–3.2 mm)
W-500 Pencil Automation	–	–	**WP-18P-12** (Vinyl)	**WP-18P-25** (Vinyl)	Water-cooled	DC: 500 A at 100% duty cycle AC: 350 A at 100% duty cycle	.020–5/32 in. (0.5–4.0 mm)
W-500A Automation	**WP-27A-3** (Rubber)	–	**WP-27A-12** (Rubber)	**WP-27A-25** (Rubber)	Water-cooled	DC: 500 A at 100% duty cycle AC: 350 A at 100% duty cycle	.040–1/4 in. (1.0–6.4 mm)
W-500B Automation	**WP-27B-3** (Rubber)	–	**WP-27B-12** (Rubber)	**WP-27B-25** (Rubber)	Water-cooled	DC: 500 A at 100% duty cycle AC: 350 A at 100% duty cycle	.040–1/4 in. (1.0–6.4 mm)
W-900 Automation	**WP-27BHD-3** (Rubber) (Power cable not included)	–	–	–	Water-cooled	DC: 900 A at 100% duty cycle AC: 630 A at 100% duty cycle	.040–1/4 in. (1.0–6.4 mm)

Weldcraft™ Tungsten

Note: Refer to manufacturer MSDS sheets for proper preparation and safety. Use proper ventilation/capture during preparation. Refer to manufacturer warning regarding ventilation.

Tungsten for the most demanding TIG welding applications!

Available in four types and industry-standard diameters, our line of Weldcraft tungsten electrodes has undergone rigorous testing to ensure the highest quality and durability. Color-coded packages include 10 seven-inch (175 mm) tungsten electrodes.

Type	Diameter in. (mm)	Part Number
2% Ceriated (EWCe-2)		
Performs well in DC welding and arc starting at low-current settings, and offers excellent performance in AC processes.	0.040 (1.0)	**WC040X7**
	1/16 (1.6)	**WC116X7**
	3/32 (2.4)	**WC332X7**
	1/8 (3.2)	**WC018X7**
	5/32 (4.0)	**WC532X7**
2% Lanthanated (EWLa-2)		
Provides excellent arc starting, arc stability and re-ignition, and less tip erosion in AC or DC welding. Can substitute for 2% Thoriated.	0.040 (1.0)	**WL2040X7**
	1/16 (1.6)	**WL2116X7**
	3/32 (2.4)	**WL2332X7**
	1/8 (3.2)	**WL2018X7**
	5/32 (4.0)	**WL2532X7**

Type	Diameter in. (mm)	Part Number
Pure (EWP)		
Forms a clean, balled end when heated and provides good arc stability for AC welding with a balanced or unbalanced squarewave or sine wave.	0.040 (1.0)	–
	1/16 (1.6)	**WP116X7**
	3/32 (2.4)	**WP332X7**
	1/8 (3.2)	**WP018X7**
	5/32 (4.0)	–
Rare Earth (EWG)		
Combines the best of all alloying elements, and provides excellent arc stability in AC or DC welding.	0.040 (1.0)	–
	1/16 (1.6)	**WG116X7**
	3/32 (2.4)	**WG332X7**
	1/8 (3.2)	**WG018X7**
	5/32 (4.0)	–

Engine-Driven

For more detailed information, visit MillerWelds.com/enginedriven

MORE on the WEB

Product Guide

	Product Guide	Page	Class	Stick	MIG	Flux-cored*	AC TIG	DC TIG	PAC**	CAC-A	Portability	Weldable Metals	Std. Generator Pwr. (watts)	Welding Amperage Range	Engine Brand	Special Features	Typical Applications
Gasoline	Blue Star® 185	67	●	●				◉	◉		Optional lift eye or running gear	Steel	6,500	60–185 DC	Kohler	Compact, portable	Maintenance, service trucks
	Bobcat™ 225	68	●	●	◉	◉	◉	●	●		Lift eye, pickup mount, optional running gear or trailer	Steel, aluminum, stainless	11,000	70–150 AC 50–225 DC	Kohler	Cost-effective AC/DC stick	Maintenance, farm/ranch, construction
	Bobcat™ 3 Phase	68	●	●	◉	●	◉	●	●				11,000	50–200 AC 50–210 DC	Kohler	Backup power for pivot irrigation	Farm/ranch
	Trailblazer® 325	70	●	●	●	●		●	●	3/16"		Steel, stainless	12,000	10–325 DC	Kohler	Auto-Speed,™ optional EFI, Excel™ power and battery charge/jump start	Fab, structural, maintenance, repair, pipe
	Trailblazer® 302 Air Pak™	72	●	●	●	●	●	●	●	3/16"			13,000	10–225 AC 10–350 DC	Kohler	AC/DC, CC/CV, 31 cfm air, battery charge/jump start	Service/maintenance, construction
Gas or LP	Bobcat™ 250	68	●	●	◉	●	◉	●	●	3/16"	Lift eye, pickup mount, optional running gear or trailer	Steel, aluminum, stainless	11,000 12,000 w/EFI	40–250 DC 40–275 DC w/EFI	Kohler	Most popular engine drive, AC/DC, optional EFI	Fab, maintenance, farm/ranch, construction
	Trailblazer® 275	70	●	●	●	●		●	●	3/16"		Steel, stainless	12,000 11,000 w/LP	10–275 DC	Kohler	Auto-Speed™	Fab, structural, maintenance, repair, pipe
Diesel	Bobcat™ 250 Diesel	68	●	●	◉	●	◉	●	●	3/16"	Lift eye, optional running gear or trailer	Steel, aluminum, stainless	11,000	40–275 DC	Kubota	Contractor's choice, AC/DC stick, strong FCAW	Fab, maintenance, farm/ranch, construction
	Trailblazer® 325 Diesel	70	●	●	●	●		●	●	3/16"		Steel, stainless	12,000	10–325 DC	Kubota	Auto-Speed,™ optional Excel™ power	Fab, structural, maintenance, repair, pipe
	Big Blue® 350 PipePro®	73	●	●	●	●		●	●	1/4"	Lift eye, pickup mount, optional trailer	Steel, stainless	12,000	20–400 DC	CAT, Mitsubishi	Premium pipe arc, LINE-X® cover	Pipeline
	Big Blue® 400 Pro	73	●	●	●	●		●	●	3/16"			12,000	20–400 DC	Kubota, Mitsubishi	Quiet, compact, fuel efficient	Construction, rental, repair
	Big Blue® 500 Pro	74	●	●	●	●		●	●	5/16"	Lift eye, generally mounted on optional trailer	Steel, stainless	21,000	20–500 DC	Deutz, Perkins	Quiet, powerful, fuel efficient	Construction, rental, repair
	Big Blue® 600 Pro	74	●	●	●	●		●	●	3/8"			27,000	20–600 DC	Kubota	Quiet, powerful, fuel efficient	Construction, rental, repair
	Big Blue® 450 Duo CST™	75	●	●				●	●	3/16"	Lift eye, pickup mount, optional trailer	Steel, stainless	10,000	5–450 DC	Mitsubishi	Dual operator in a compact package	Construction, fabrication, pipe
	Big Blue® 700 Duo Pro	75	●	●	●	●		●	●	3/8"	Lift eye, generally mounted on optional trailer	Steel, stainless	20,000	20–800 DC	Deutz	Premium pipe arc, dual operator	Pipeline, construction, mining
	Big Blue® 800 Duo Pro	76	●	●	●	●		●	●	1/2"			27,000	20–800 DC	Deutz	Heavy duty, dual operator	Mining, construction, pipeline
	Big Blue® 800 Duo Pro SF	76	●	●	●	●		●	●	1/2"			27,000	20–800 DC	Deutz	Smart feeder compatible	Mining, construction, pipeline
	Big Blue® 800 Duo Air Pak™	76	●	●	●	●		●	●	1/2"			27,000	20–800 DC	Deutz	Heavy duty, dual operator, air compressor	Mining, construction, railroad, repair

EFI advantages (vs. carburetor models)

- Up to 42 percent more fuel efficient
- Faster, more reliable starts in any weather – no choke adjustment needed
- Less refueling time
- Fewer emissions

Gasoline advantages (vs. diesel)

- Lower product cost (by 50 to 70 percent)
- Smaller size and less weight
- Less expensive repairs
- Easier cold weather starting

Diesel advantages (vs. gas)

- 1.5 to 2.5 times the engine life
- Required on some jobsites for safety
- Typically have longer maintenance intervals
- Convenient if other equipment is diesel

Product Key

Class: ● Light industrial ● Industrial ● Heavy industrial Capability: ● Designed for this process ◉ Capable of this process

New! or Improved! products appear in blue type. *If using self-shielded wire, use CV weld output. **With appropriate Spectrum plasma cutter.

Blue Star® 185

See literature no. ED/2.5

Reliable outdoor portable power! Great for farm, ranch, maintenance, construction and hobbyist.

Compact and portable, its small footprint uses little truck space. Optional running gear also makes the Blue Star one-man portable.

All engine controls are on front panel.

Stick and TIG capable.

Accu-Rated™ peak generator power is usable for maximum generator loads such as plasma cutting, Millermatic® MIG welders and motor starting.

Includes electric start, 120-volt GFCI and 240-volt receptacles, 6.25-gallon fuel capacity, auto-idle and engine hour meter.

Light industrial ● CC DC

Processes

▪ Stick (SMAW) ▪ TIG (GTAW)

Gasoline engine

Kohler CH440: 13.4 hp at 3,600 rpm
One-cylinder, four-cycle, OHV, air-cooled

Note: Engine is warranted separately by engine manufacturer.

Most popular accessories

- Lifting Eye #195 353 (pg 108)
- Running Gear #301 246 (pg 108)
- Protective Cover #301 245 (pg 108)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

	Stock Number	Welding Mode	Welding Process	Amperage Range	Rated Output at 104°F (40°C)	Single-Phase Generator Power at 104°F (40°C)	Dimensions	Net Weight
Gasoline	(#907 664) Kohler	CC/DC	DC stick/TIG	60–185	185 A at 25 V, 20% duty cycle 150 A at 25 V, 100% duty cycle	Peak: 6,500 watts Continuous: 6,200 watts	H: 24.75 in. (629 mm) W: 20.625 in. (524 mm) D: 31.25 in. (794 mm)	296 lb. (134 kg)

Bobcat™/Trailblazer®: Which is Right for You?

Gas Model Comparison

**Based on typical usage — 150 amps welding 40% of the time; 20 amps generator power 30% of the time; and idling without load 30% of the time.*

Bobcat (page 68)

The most popular welder/generator:

- Dependable power and weld output
- Cost-effective multiprocess welder/generator
- Easy to maintain
- Quietest in its class

Trailblazer (page 70)

The best performer in the industry:

- Unbeatable arc performance
- Independent welder and generator power system
- Exclusive technologies — Auto-Speed™ and Excel™ power
- Most fuel efficient and quietest in its class

	Bobcat 225	UPGRADE	Bobcat 250	UPGRADE	Trailblazer 275	UPGRADE	Trailblazer 325
Sound Levels (at 23 feet)							
At Maximum Load / At 150 Amps	73 dB / 72 dB	→	73 dB / 72 dB	→	74 dB / 65 dB		74 dB/65 dB
Sound Quality	Good	→	Very good	→	Excellent		Excellent
Fuel System							
Typical Runtime per 12-Gallon Tank*	13 hours	→	13 / 15.5 hours with EFI	→	15 hours		Up to 21 hours with options
Efficiency	Good	→	Good / Very good with EFI	→	Excellent		Excellent
Type	Gasoline		Gasoline or LP		Gasoline or LP		Gasoline
Delivery	Carburetor	→	**Carburetor or EFI available**		Carburetor	→	**Carburetor or EFI available**
Generator							
Watts	11,000	→	11,000 / 12,000 with EFI	→	12,000 / 11,000 with LP		12,000
Clean Power Quality	Very good / Excellent		Very good / Excellent	→	Excellent		Excellent
Power While Welding	Fair / Good With voltage control set near maximum	→	Good Easier to fine-tune with arc voltage control near maximum	→	Independent weld and generator power with no interaction between tools and welding arc		Independent weld and generator power with no interaction between tools and welding arc
Excel™ Power Generator (120 V, 60 Hz at all engine speeds)	N/A		N/A	→	N/A		**Excel power available**
Weld Performance							
Stick	Good / Very good	→	Very good	→	Excellent	→	Excellent
MIG — Wire (solid / FCAW), Steel	Fair (.035 in.)	→	Good (.035–1/16 in.)	→	Excellent (.023–1/16 in.)	→	Excellent (.023–1/16 in.)
MIG — Wire, Aluminum w/Spool Gun	Fair / Good (add WC-115A with contactor)	→	Very good (add WC-115A with contactor)	→	Excellent (add WC-24)		Excellent (add WC-24)
DC TIG (steel)	Good	→	Very good	→	Excellent		Excellent
Pulsed DC TIG (thin metal, out of position)	N/A		N/A	→	Yes		Yes
AC Weld	70–150 amps (TIG: add HF-251D-1 and contactor kit)	→	40–250 amps (TIG: add HF-251D-1 and contactor kit)		Add Dynasty®		Add Dynasty®
Carbon Arc Gouging	N/A	→	Good / Very good Carbons: Rated 3/16 in.	→	Very good Carbons: Rated 3/16 in.	→	Very good Carbons: Rated 3/16 in., Capable 1/4 in.
Key Features							
Digital Meters with SunVision™	N/A		N/A	→	Yes		Yes
Maintenance Displays	Hours / Oil change	→	Hours / Oil change / Fuel	→	Hours / Oil change / Fuel / RPMs		Hours / Oil change / Fuel / RPMs
Battery Charge / Jump Start	N/A		N/A		N/A	→	**12/24-volt available**
14-pin Receptacle	N/A		N/A	→	Yes		Yes

Bobcat™ Series

Gas, LP and Diesel

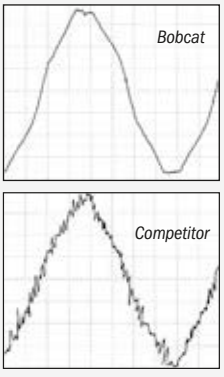
Bobcat 250 EFI shown.

Bobcat engine-driven welder/generators are the top selling in their class because they are engineered to be reliable, powerful and durable. Their multiprocess capabilities make them ideal for maintenance trucks where reduced size and weight are essential.

Cleaner and stronger generator power

11,000 watts (12,000 on Bobcat 250 with EFI) of clean, truly usable generator power that is Accu-Rated™, not inflated – tested to deliver uninterrupted peak output for a minimum of 30 seconds for big loads, so you can get more jobs done.

Advanced generator technology virtually eliminates power spikes and other electrical imperfections so welds are cleaner and jobsite tools can run without interruption, maximizing quality, productivity and profit.



Waveform Comparison

Fewer refueling trips

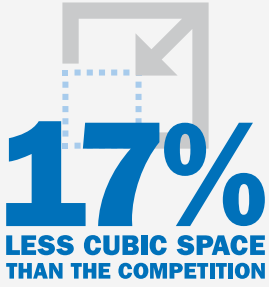
Large 12-gallon fuel capacity means extended runtimes and less refueling.

Versatile AC and DC welding

Provides AC and DC welding output for greater versatility and quality welds on all types of metals. DC is smooth and easy to run while AC stick is used when arc blow occurs.

More portable, uses less truck space

Smaller and lighter – 17 percent less cubic space and weighing up to 100 pounds less than the competition – means moving Bobcat welder/generators is faster and easier, for maximum productivity. And because they take up less space, they let work trucks carry more equipment and gear so your work crews can meet weight limits and be ready for anything.



Easier maintenance

Easy-to-read front panel maintenance displays show engine hours and hours left before an oil change is due. This intuitive design makes maintenance fast and easy.

- Oil checks from the top by the front panel
- Toolless panels that allow for quick access
- Single-side fuel fill and oil drain/filter

Bobcat™ 225 (Gas) See literature no. ED/4.4

Cost-effective, multiprocess welder/generator primarily used for stick welding. Great for farm, ranch, maintenance/repair and as a stand-alone generator.

Features three DC stick/TIG controls, one AC stick/TIG control and one wire range for output control. Stick ranges designed for 3/32, 1/8 and 5/32 inch. Very easy to set.

Bobcat™ 3 Phase (Gas) See literature no. ED/4.33

Designed for farm and ranch owners in need of single- and three-phase power to run 480-volt three-phase pivot irrigation systems or to provide backup power for home, farm and/or ranch.

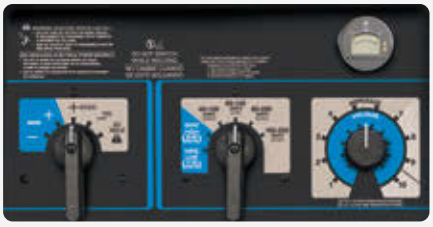
Bobcat™ 250 (Gas, LP or Diesel) See literature no. ED/4.4 (Gas/LP) and ED/4.34 (Diesel)

Most Popular! **Multiprocess engine-driven welder/generator capable of carbon arc gouging features a larger stabilizer for less spatter and smoother arc. Ideal welder/generator for maintenance/repair, construction, farm/ranch or as a stand-alone generator.**

Convenient front panel fuel gauge.

More precise amperage settings with wider range for optimal stick/flux-cored welding.

Features four AC/DC stick/TIG controls and two wire ranges for output control. Stick ranges designed for 3/32, 1/8, 5/32 and 3/16 inch. Very easy to set.



Add optional electronic fuel injection (EFI) — improved fuel efficiency for maximum productivity and profitability

Adding EFI to your Bobcat 250 welder/generator provides multiple benefits. With EFI you'll get faster, more reliable starts in any weather — no choke adjustments needed. EFI-equipped Bobcat 250 machines are also up to 42 percent more fuel efficient than standard carbureted models, improving profitability. Plus, refueling less frequently means you'll spend more of your time welding, improving productivity.

**Recommended for operation at altitudes above 5,000 feet.*

Industrial CC/CV AC/DC

Processes

- AC/DC stick (SMAW)
- MIG (GMAW)[1] • Flux-cored (FCAW)[1]
- AC[2]/DC TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A)[3] (rated 3/16 in. carbons)

[1]With voltage-sensing feeder only.
[2]With Dynasty® 210 Series or HF-251 (non-critical).
[3]Bobcat 250 models only.

Engines

Gas: Kohler CH730
23.5 hp at 3,600 rpm
EFI gas: Kohler ECH730
23 hp at 3,600 rpm
LP: Kohler CH730
Liquid withdrawal LP system
21.5 hp at 3,600 rpm
V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled
EPA Tier 4 Final Diesel: Kubota D722
19 hp at 3,600 rpm
Three-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® X-TREME™ Feeders (pg 42)
- Dynasty® 210 Series (pg 54)
- Spectrum® 625 X-TREME™ (pg 82)
- Multi-Terrain Running Gear (pg 108)
- Off-Road Running Gear (pg 108)
- Protective Cage with Cable Holders (pg 108)
- Hose and LP Tank Mounting Assembly (pg 108)
- Remote Oil Drain/Filter Kit (pg 108)
- All-Purpose Running Gear (pg 108)
- Full KVA Adapter Cord #300 517 (pg 108)
- Protective Cover (pg 108)
- HWY-1000 Trailer #195 013 (pg 109)
- GFCI Panel Mount 120 VAC Duplex Kit #300 975
- Electric Fuel Pump Kit* (gas models only) #300 976
- Spark Arrestor Kit (gas models only) #300 924

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

	Model	Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)	Generator Power at 104°F (40°C)	Dimensions	Net Weight
Gasoline	Bobcat 225	**(#907 498 001)** Kohler **(#907 498)** Kohler with GFCI	CC/AC	Stick/TIG	70-150 A	150 A at 25 V, 100% duty cycle	Single-phase Peak: 11,000 watts Continuous: 9,500 watts	H: 28 in. (711 mm) H: 32.75 in. (832 mm) to top of exhaust W: 20 in. (508 mm) D: 40.5 in. (1,029 mm)	485 lb. (220 kg)
			CC/DC	Stick/TIG	50-225 A	225 A at 25 V, 100% duty cycle			
			CV/DC	MIG/FCAW	19-28 V	200 A at 20 V, 100% duty cycle			
	Bobcat 3 Phase	**(#907 505)** Kohler with GFCI	CC/AC	Stick/TIG	50-200 A	200 A at 25 V, 100% duty cycle	Single-phase/three-phase Peak: 11,000 watts Continuous: 9,500 watts/10,000 watts		495 lb. (225 kg)
			CC/DC	Stick/TIG	50-210 A	210 A at 25 V, 100% duty cycle			
			CV/DC	MIG/FCAW	19-28 V	200 A at 20 V, 100% duty cycle			
Gas or LP	Bobcat 250	**(#907 500 001)** Kohler **(#907 500)** Kohler with GFCI **(#907 500 002)** Kohler with electric fuel pump* **(#907 502) EFI** Kohler **(#907 504) LP** Kohler with GFCI *(order hose and LP tank mounting assembly #300 917 separately)*	CC/AC	Stick/TIG	40-250 A 40-275 A w/EFI	250 A at 25 V, 60% duty cycle 225 A at 25 V, 100% duty cycle	Single-phase Peak: 11,000 watts Continuous: 9,500 watts **EFI model** **Peak: 12,000 watts** **Continuous: 10,500 watts**	H: 28 in. (711 mm) H: 32.75 in. (832 mm) to top of exhaust W: 20 in. (508 mm) D: 40.5 in. (1,029 mm)	501 lb. (227 kg)
			CC/DC	Stick/TIG	40-250 A 40-275 A w/EFI	250 A at 25 V, 100% duty cycle			
			CV/DC	MIG/FCAW	17-28 V	275 A at 25 V, 60% duty cycle 250 A at 25 V, 100% duty cycle			
Diesel	Bobcat 250 Diesel	**(#907 565)** Kubota with GFCI	CC/AC CC/DC	Stick/TIG	40-275 A	250 A at 25 V, 100% duty cycle	Single-phase Peak: 11,000 watts Continuous: 9,500 watts	H: 28 in. (711 mm) H: 34.5 in. (876 mm) to top of exhaust W: 20 in. (508 mm) D: 45.5 in. (1,156 mm)	638 lb. (289 kg)
			CV/DC	MIG/FCAW	17-28 V	275 A at 25 V, 60% duty cycle 250 A at 28 V, 100% duty cycle			

Trailblazer® Series

Gas, LP and Diesel

See lit. no. ED/4.75 (Gas/LP) and ED/4.8 (Diesel)

See page 113

Trailblazer 325 EFI shown.

Trailblazer welder/generators deliver unbeatable arc performance providing the smoothest, most stable arc in the industry. The Trailblazer exclusive Auto-Speed™ technology delivers superior runtimes, increased fuel efficiency, and improved welder/generator performance.

Unbeatable arc performance

Wide amperage output with better welding deposition rates means you can get jobs done faster, saving time and money. The Trailblazer also has precise arc control, which allows you to fine-tune the arc to match your personal preferences and quickly dial in the perfect parameters to optimize weld quality and maximize productivity across a variety of applications and welding processes.

Cleaner and stronger generator power

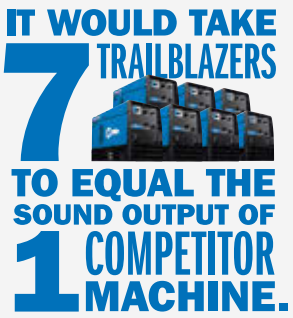
Combines a 25 hp engine and 12,000 watts of clean, truly usable generator power that is Accu-Rated™, not inflated – tested to deliver uninterrupted peak output for a minimum of 30 seconds for big loads, so you can get more jobs done.

Maximum cost savings

Less money spent on fuel means more profit for you. Every Trailblazer welder/generator has fuel-saving Auto-Speed technology – add optional Excel™ power and EFI to save even more on fuel costs and enjoy a combination of advanced, profit-enhancing features that are only available on a Trailblazer welder/generator.

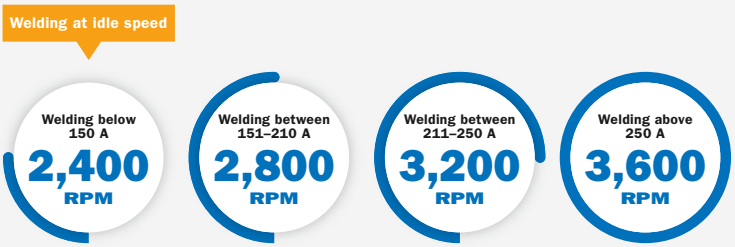
Safer, more productive jobsites

Quieter jobsites are safer and more productive because work crews can communicate easier, and work can start earlier and end later – even in noise-sensitive areas.



Auto-Speed technology

Get the welding power you need – plus reduced fuel consumption and lower noise levels for a more-profitable, safer jobsite. Unlike competitive machines that operate at 3,600 rpm (max) under any load, Miller-exclusive Auto-Speed technology responds to weld requirements by automatically adjusting engine speed to one of four rpm levels so the engine never works harder than necessary. Refueling time and operating costs are reduced, which means more productivity and profitability. Auto-Speed technology – available only from Miller.



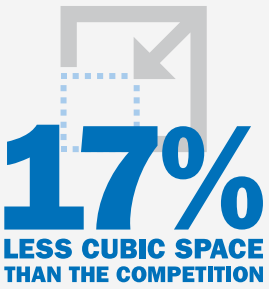
Auto-Speed™ in XX18 mode

Fewer refueling trips

Spend more time working and less time refueling. Only Trailblazer welder/generators provide Auto-Speed technology, plus Excel power and electronic fuel injection (EFI) options, to deliver maximum runtime.

More portable, uses less truck space

Smaller and lighter – 17 percent less cubic space and 10 percent less machine weight than the competition – means moving Trailblazer welder/generators is faster and easier, for maximum productivity.

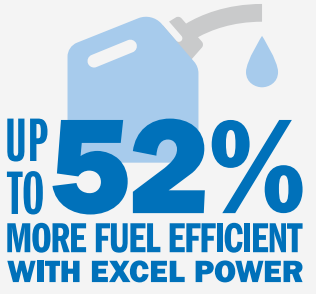


Options to Maximize Your Trailblazer 325 Performance

Excel™ power

Unlike competitive machines that provide auxiliary power only at 3,600 rpm (max), Excel power delivers a full 2,400 watts (20 A) of 120-volt inverter-based, pure sine wave power at all speeds, including idle. With Excel power you can operate jobsite tools like grinders at quiet, fuel-saving speeds.

Refueling time and operating costs are reduced with Excel power, which means more productivity and profitability. Plus everyone on the jobsite gets a better working environment because noise levels and exhaust emissions are lowered. Excel power – available only from Miller.

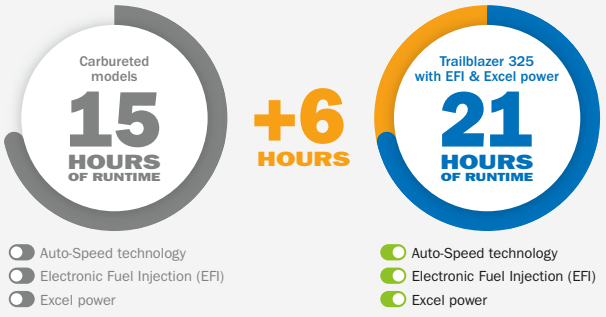


Based on generator-only use for total runtime.

EFI (gas models)

Adding EFI to your Trailblazer welder/generator adds multiple benefits. With EFI, you'll get faster, more-reliable starts in any weather – no choke adjustments needed. EFI-equipped Trailblazer machines are also up to 40 percent more fuel efficient than standard carbureted models, improving profitability. Plus, refueling less frequently means you'll spend more of your time welding, improving productivity.

Add Excel power to your Trailblazer with EFI, and you'll have the most fuel-efficient compact welder/generator available.



Based on typical usage – 150 amps welding 40% of the time; 20 amps generator power 30% of the time; and idling without load 30% of the time.

Battery charge/jump start (gas models)

Reduce downtime with battery charge/jump start capability. Designed and recommended for mechanics or anyone else responsible for a fleet of trucks or equipment. By using your Trailblazer to charge dead batteries or jump a stubborn engine, you'll keep your crew working and the fleet up and running.

Note: Battery charge/jump cables (#300 422) must be ordered separately.

**Recommended for operation at altitudes above 5,000 feet.*

Heavy industrial CC CV DC

Processes

- Stick (SMAW)
- MIG (GMAW)[1]
- Flux-cored (FCAW)[1]
- DC TIG/pulsed TIG (GTAW/GTAW-P)[2]
- Air carbon arc cutting and gouging (CAC-A) (rated 3/16 in. carbons, capable 1/4 in. carbons)

[1]*With wire feeder.*
[2]*Two-piece TIG torch recommended.*

Engines

Gas: Kohler CH730
23.5 hp at 3,600 rpm
EFI gas: Kohler ECH730
23 hp at 3,600 rpm
LP: Kohler CH730
Liquid withdrawal LP system
21.5 hp at 3,600 rpm
V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled
EPA Tier 4 Final Diesel: Kubota D902
24.8 hp at 3,600 rpm
Three-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- Spoolmatic® 30A / WC-24 Control #130 831 / #137 549 (pg 19)
- SuitCase® X-TREME™ 12VS (pg 42)
- Dynasty® Series (pg 54/56)
- Spectrum® 625 X-TREME™ (pg 82)
- Multi-Terrain Running Gear (pg 108)
- Off-Road Running Gear (pg 108)
- Protective Cage with Cable Holders (pg 108)
- Hose and LP Tank Mounting Assembly (pg 108)
- All-Purpose Running Gear (pg 108)
- Full KVA Adapter Cord #300 517 (pg 108)
- Protective Cover (pg 108)
- HWY-1000 Trailer #195 013 (pg 109)
- Electric Fuel Pump Kit (gas models only) #300 976 Recommended for operation at altitudes above 5,000 feet.
- 25 ft. Battery Charge/Jump Cables with plug (for Trailblazer 325 EFI #907 512 002 only) #300 422

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

	Model	Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)	Single-Phase Generator Power at 104°F (40°C)	Dimensions	Net Weight
Gas or LP	**Trailblazer 275**	**(#907 506)** Kohler with GFCI **(#907 691) LP** Kohler with Excel power and GFCI *(order hose and LP tank mounting assembly #300 917 separately)*	CC/DC	Stick/TIG	10–275 A	275 A at 28 V, 100% duty cycle	Peak: 12,000 watts 11,000 watts (LP) Continuous: 10,500 watts 9,500 watts (LP) **Excel power (optional) 2,400 watts** 20 A at 120 V, 60 Hz pure generator power at idle speed and while welding.	H: 28 in. (711 mm) H: 32.75 in. (832 mm) to top of exhaust W: 20 in. (508 mm) D: 40.5 in. (1,029 mm)	459 lb. (208 kg)
			CV/DC	MIG/FCAW	10–35 V	275 A at 28 V, 100% duty cycle			
Gasoline	**Trailblazer 325**	**(#907 510 001)** Kohler **(#907 510)** Kohler with GFCI **(#907 510 002)** Kohler w/electric fuel pump* **(#907 512) EFI** Kohler **(#907 512 001) EFI** Kohler with Excel power **(#907 512 002) EFI** Kohler with Excel power and battery charge/jump start **(#907 512 003) EFI** Kohler with Excel power and GFCI	CC/DC	Stick/TIG	10–325 A	325 A at 28 V, 100% duty cycle		H: 28 in. (711 mm) H: 32.75 in. (832 mm) to top of exhaust W: 20 in. (508 mm) D: 40.5 in. (1,029 mm)	460 lb. (209 kg)
			CV/DC	MIG/FCAW	10–35 V	325 A at 28 V, 100% duty cycle			
Diesel	**Trailblazer 325 Diesel**	**(#907 566 001)** Kubota **(#907 566)** Kubota with GFCI **(#907 566 002)** Kubota with Excel power	CC/DC	Stick/TIG	10–325 A	325 A at 33 V, 100% duty cycle		H: 28 in. (711 mm) H: 34.5 in. (876 mm) to top of exhaust W: 20 in. (508 mm) D: 45.5 in. (1,156 mm)	620 lb. (281 kg)
			CV/DC	MIG/FCAW	10–35 V	325 A at 33 V, 100% duty cycle			

Trailblazer® 302 Air Pak™

See literature no. ED/4.78

Powerful all-in-one tool designed for repair and construction with multiprocess weld quality, generator power, air compressor and battery charge/jump start.

See page 113

Superior arc performance. Preset dig settings optimized for the majority of stick welding applications, best-in-class wire arc performance, and two Lift-Arc™ TIG modes for most DC TIG applications.

Strongest combined generator/compressor power. Delivers an industry-leading 13,000 watts of peak generator power independent of weld settings – can power a Spectrum® 875 plasma cutter, and provide air for plasma cutting at the same time (rated 5/8-inch mild steel).

Rotary screw air compressor. Delivers up to 31 cfm and 160 psi of air with no storage tank. Gives 100 percent deliverable air and runs many tools at idle speed. Air outputs are rated at an industry-high 104 degrees Fahrenheit (40°C). Front panel air pressure adjustment and automatic overpressure shutdown with indication. Designed for more than 30,000 hours of operation and warranted for three years by Miller.

Battery charge/jump start. Provides selectable 12- or 24-volt battery charging capability with up to 450 amps of battery jump-starting capability. Convenient front panel battery charger/jump starter access.

Note: Battery charge/jump cables (#300 422) must be ordered separately.

**Recommended for operation at altitudes above 5,000 feet.*

Heavy industrial CC/CV AC/DC

Processes

- AC/DC stick (SMAW)
- MIG (GMAW)[1] • Flux-cored (FCAW)[1]
- AC[2]/DC[3] TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 3/16 in. carbons, capable 1/4 in. carbons)

[1] With wire feeder.
[2] With Dynasty® 210 Series or HF-251 (non-critical).
[3] Two-piece TIG torch recommended.

Gasoline engine

Kohler CH750: 27 hp at 3,600 rpm V-twin-cylinder, four-cycle, overhead valve, industrial, air-cooled

Note: Engine is warranted separately by engine manufacturer.

Most popular accessories

- Spoolmatic® 30A Aluminum Spool Gun / WC-24 Control #130 831 / #137 549 (pg 19)
- SuitCase® X-TREME™ 12VS (pg 42)
- 25 ft. Battery Charge/Jump Cables with Plug #300 422

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Gasoline

Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Weld Output at 104°F (40°C)	Single-Phase Generator Power at 104°F (40°C)	Dimensions	Net Weight
(#907 549 001) Kohler **(#907 549)** Kohler with GFCI and electric fuel pump* **(#907 549 003)** Kohler with GFCI, cooler/separator and electric fuel pump*	CC/DC	Stick/TIG	10–300 A	280 A at 32 V, 100% duty cycle	Peak: 13,000 watts Continuous: 11,000 watts	H: 28 in. (711 mm) H: 34.5 in. (876 mm) to top of exhaust W: 20 in. (508 mm) D: 59.625 in. (1,514 mm)	771 lb. (350 kg)
	CV/DC	MIG/FCAW	13–35 V, 350 A	300 A at 32 V, 100% duty cycle 350 A at 32 V, 60% duty cycle			
	CC/AC	TIG/stick	10–225 A	200 A at 25 V, 60% duty cycle			

Air Compressor	Features	Free Air Delivery at 3,600 RPM	Free Air Delivery at 3,000 RPM	Free Air Delivery at 2,400 RPM (idle)	Working Pressure Constant	Duty Cycle	Oil Capacity
	Rotary screw with electric clutch for on/off, oil change intervals of 500 hours	31 cfm (0.88 m^3/min.)	28 cfm (0.79 m^3/min.)	22 cfm (0.62 m^3/min.)	80–160 psig	100%	1.75 qt. (1.7 L)

Bobcat™ Diesel • Trailblazer® Diesel • Big Blue® 350 PipePro® • Big Blue® 400 Pro Big Blue® 450 Duo CST™ • Big Blue® 500 Pro • Big Blue® 600 Pro Big Blue® 800 Duo Pro • Big Blue® 800 Duo Pro SF • Big Blue® 800 Duo Air Pak™

T4F Tier 4 Final Compliance

EPA Tier 4 Final

Cleaner Equipment, Cleaner Air

Tier 4 Final (T4F) is the U.S. Environmental Protection Agency's (EPA's) latest step in a series of increasingly strict emission standards for diesel engines. It has resulted in diesel engines that not only operate more cleanly, but also produce power more efficiently. As the world becomes more environmentally conscious to care for future generations; Miller has redesigned its diesel engine-driven welder/generator product line.

For every job, there's a Miller® welder/generator to get the job done right.

Selecting the right size of welder/generator helps maximize your resource efficiency and reduce your emissions footprint. Demanding tasks such as welding thick metals and gouging large-diameter carbons may require amperage that only a higher-horsepower machine can provide. Jobs requiring less amperage often can be handled by machines having less than 25 hp, which are not subject to the same T4F regulations.

Learn more at **MillerWelds.com/tier4**

Big Blue® 350 PipePro®

See literature no. ED/5.4

Designed for transmission pipeline work, this system offers a complete welding solution. With stick as well as MIG/FCAW welding capabilities it is ideal for the most demanding pipeline jobs.

WIRELESS REMOTE COMPATIBLE

See page 113. Wireless antenna kit (#300 749) recommended.

System components (order items separately)
- Miller® Big Blue 350 PipePro engine drive
- Miller SuitCase® X-TREME™ wire feeder (now both 8VS and 12VS meet PipePro system needs, see page 43 for specs)
- Bernard™ PipePro Dura-Flux™ gun
- Hobart® Fabshield® 71T8/X80 wire
- Miller wireless remote hand control

*Visit **MillerWelds.com/pipepro** for complete information and spec sheets.*

Easy arc starts and better arc control provide improved performance to produce more consistent welds.

Enhanced MIG/FCAW arc control for best in class performance.

The vault — ultimate control board reliability. A sealed aluminum case protects the circuit board from dust, dirt, moisture and heat.

Low OCV stick (VRD) for improved operator safety without compromising arc starts.

Auto Remote Sense™ (ARS) eliminates confusion of a remote/panel switch.

Compact size and weight optimizes truck space.

LINE-X® cover provides superior impact, corrosion and abrasion protection.

Quiet operation. Only 70.7 decibels (95.5 Lwa) under full load. Improves jobsite communication and safety.

EPA, CSA, IEC and NEMA compliant.

Standard features include digital preset weld meters, auto idle, 120-volt block heater and output contactor control.

Optional stainless steel package available.

Heavy industrial CC/CV DC

Processes
- Stick (SMAW) • MIG (GMAW)
- Flux-cored (FCAW) • TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 1/4 in. carbons)

Diesel engines

EPA Tier 4 Final choices

CAT C1.5T: 24.7 hp at 1,800 rpm Turbo 3-cylinder, industrial, liquid-cooled

Mitsubishi S4L2: 24.7 hp at 1,800 rpm Four-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Big Blue 350 PipePro System (order items separately)
- Big Blue 350 PipePro engine drive
- SuitCase X-TREME feeder with Bernard PipePro Dura-Flux gun
  #951 593 8VS
  #951 592 12VS
- Bernard PipePro Dura-Flux gun with 10 ft. (3 m) cable #301 011 (included with feeders above)
- Hobart Fabshield wire
  #S228519-P32 FS 71T8 1/16 in.
  #S228525-P32 FS 71T8 5/64 in.
  #S228825-P32 FS X80 5/64 in.
- Wireless Remote Hand Control/ Wireless Antenna Kit #300 430/#300 749 (pg 113)

Visit MillerWelds.com or your distributor for Miller® options and accessories.

Diesel

Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)	Single-Phase Generator Power at 104°F (40°C)	Dimensions	Net Weight
Big Blue 350 PipePro (engine drive only) **(#907 478)** CAT Turbo **(#907 478 001)** CAT Turbo w/stainless steel **(#907 428)** Mitsubishi **(#907 428 001)** Mitsubishi w/stainless steel	CC/DC	TIG/stick	20–400 A	300 A at 32 V, 100% duty cycle 350 A at 27 V, 100% duty cycle 400 A at 24 V, 100% duty cycle	Peak: 12,000 watts Continuous: 10,000 watts	H: 32 in. (813 mm) W: 26.25 in. (667 mm) D: 56 in. (1,422 mm)	**Caterpillar** 1,063 lb. (482 kg) **Mitsubishi** 1,018 lb. (462 kg)
	CV/DC	MIG/FCAW	14–40 V				

Big Blue® 400 Pro

See literature no. ED/5.7

Clean, quiet and reliable low-speed EPA-compliant diesel is more efficient than ever before. Ideal for construction, piping and fleet use.

WIRELESS REMOTE COMPATIBLE

See page 113. Wireless antenna kit (#300 749) recommended.

400-amp output now available in a compact package. Provides up to 400 amps at 100 percent duty cycle.

The vault — ultimate control board reliability. A sealed aluminum case protects the circuit board from dust, dirt, moisture and heat.

Low OCV stick (VRD) for improved operator safety without compromising arc starts.

Tailored arc control (DIG) allows arc characteristics to be changed for specific applications and electrodes. Smooth running 7018 or stiffer, more penetrating 6010.

Quiet operation. Only 71.6 decibels (96 Lwa) under full load. Improves jobsite communication and safety.

EPA, CSA, IEC and NEMA compliant.

Standard features include digital weld meters, auto idle, 120-volt block heater and output contactor control.

Heavy industrial CC/CV DC

Processes
- Stick (SMAW) • MIG (GMAW)
- Flux-cored (FCAW) • TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 3/16 in. carbons)

Diesel engines

EPA Tier 4 Final choices

Kubota V1505: 20.2 hp at 1,800 rpm Four-cylinder, industrial, liquid-cooled

Mitsubishi S4L2: 24.7 hp at 1,800 rpm Four-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories
- SuitCase® Feeders (pg 42)
- Dynasty® 210 Series (pg 54)
- Spectrum® 875 (pg 82)
- Protective Cover #195 301 (pg 108)
- Wireless Remote Hand Control/ Wireless Antenna Kit #300 430/#300 749 (pg 113)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Diesel

Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)	Single-Phase Generator Power at 104°F (40°C)	Dimensions	Net Weight
(#907 606) Kubota **(#907 605)** Mitsubishi	CC/DC	TIG/stick	20–400 A	300 A at 32 V, 100% duty cycle 350 A at 27 V, 100% duty cycle 400 A at 24 V, 100% duty cycle	Peak: 12,000 watts Continuous: 10,000 watts	H: 32 in. (813 mm) W: 26.25 in. (667 mm) D: 56 in. (1,422 mm)	**Kubota** 950 lb. (431 kg) **Mitsubishi** 993 lb. (450 kg)
	CV/DC	MIG/FCAW	14–40 V				

Big Blue® 500 and 600 Pro

See literature no. ED/11.0 (500) and ED/11.5 (600)

Clean, quiet, multiprocess machines designed to give welders the output they need for heavy-duty applications on construction and fabrication sites.

Big Blue 500 Pro (Deutz T4 Final)

Deluxe models shown with vandalism lockout removed.

Big Blue 600 Pro

WIRELESS REMOTE COMPATIBLE

See page 113. Wireless antenna kit (#300 749) recommended.

Electronic engine display simultaneously displays fuel level, engine hours, coolant temperature, oil pressure, battery volts, and engine rpm. Also tracks oil change intervals and displays engine diagnostics for quick and easy servicing. *Not available on Perkins or CA (Tier 4i) models which use meter maintenance displays as seen in smaller inset photo.*

Infinite arc control allows the arc characteristics to be changed for specific applications in stick, MIG and flux-cored welding.

Low OCV stick (VRD) for improved operator safety without compromising arc starts.

Auto Remote Sense™ (ARS) detects if a remote control is plugged into the 14-pin receptacle and eliminates confusion of a remote/panel switch.

Thermal overload protection prevents machine damage if the duty cycle is exceeded or airflow is blocked.

EPA, CSA, IEC and NEMA compliant.

Standard features include digital preset weld meters, automatic idle, and cold weather starting aids.

Deluxe model adds a polarity reversing switch and a vandalism lockout (protects control panel and receptacles, see photo at right).

Heavy industrial

CC/CV DC

Processes

- Stick (SMAW) ▪ MIG (GMAW)
- Flux-cored (FCAW) ▪ DC TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (500: rated 5/16 in. carbons; 600: rated 3/8 in. carbons)

Diesel engines

EPA Tier 4 Final choices

500 Pro — Deutz D2.9 L4
34.8 hp at 1,800 rpm
Four-cylinder, industrial, liquid-cooled

500 Pro — Perkins 404D.22
32.6 hp at 1,800 rpm
Four-cylinder, industrial, liquid-cooled

600 Pro — Kubota V2403
48.9 hp at 1,800 rpm
Four-cylinder, industrial, liquid-cooled

EPA Tier 4i CA model

500 Pro — Deutz D2011L03
32 hp at 1,800 rpm
Three-cylinder, industrial, air/oil-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® X-TREME™ 8VS/12VS (pg 42)
- Full KVA Adapter Cord #300 517 (pg 108)
- Full KVA Plug Kit (pg 108)
  #119 172 Single-phase
  #254 140 Three-phase
- Protective Covers (pg 108)
  #301 113 Deutz/Kubota T4F models
  #194 683 Perkins/Deutz CA models
- Wireless Remote Hand Control/ Wireless Antenna Kit #300 430/#300 749 (pg 113)
- Spark Arrestor Kit #195 012

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Diesel

Model	Stock Number	Welding Mode/Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)	Generator Power at 104°F (40°C)	Dimensions	Net Weight
Big Blue 500 Pro	**Tier 4 Final** **(#907 561)** Deutz **(#907 561 001)** Deutz Deluxe model **(#907 667)** Perkins **(#907 667 001)** Perkins Deluxe model **Tier 4i CA model (NOT available for sale in the USA)** **(#907 635)** Deutz **(#907 635 001)** Deutz Deluxe model	CC/DC (Stick/TIG)	20–500 A	**Deutz T4F models** 400 A at 36 V, 100% duty cycle 450 A at 38 V, 60% duty cycle 500 A at 38 V, 40% duty cycle **Perkins/Deutz CA models** 400 A at 36 V, 100% duty cycle 450 A at 33 V, 60% duty cycle 500 A at 30 V, 40% duty cycle	Three-phase Peak: 21,000 watts Continuous: 15,000 watts Single-phase Peak: 15,000 watts Continuous: 12,000 watts	**Deutz T4F models** H: 46 in. (1,168 mm) W: 28.5 in. (724 mm) D: 69.5 in. (1,765 mm) **Perkins/Deutz CA models** H: 42 in. (1,067 mm) W: 28.5 in. (724 mm) D: 65.125 in. (1,654 mm)	**Deutz T4F models** 1,800 lb. (816.5 kg) **Perkins models** 1,530 lb. (694 kg) **Deutz CA models** 1,550 lb. (703 kg)
		CV/DC (MIG/FCAW)	14–40 V				
Big Blue 600 Pro	**Tier 4 Final** **(#907 695)** Kubota **(#907 695 001)** Kubota Deluxe model	CC/DC (Stick/TIG)	20–600 A	500 A at 40 V, 100% duty cycle 550 A at 42 V, 60% duty cycle 600 A at 42 V, 40% duty cycle	Three-phase Peak: 27,000 watts Continuous: 20,000 watts Single-phase Peak: 15,000 watts Continuous: 12,000 watts	H: 46 in. (1,168 mm) W: 28.5 in. (724 mm) D: 69.5 in. (1,765 mm)	1,750 lb. (794 kg)
		CV/DC (MIG/FCAW)	14–44 V				

Big Blue® 450 Duo CST™

See literature no. ED/5.5

Durable dual-operator welder/generator delivers proven CST 280 stick/TIG performance for maximum productivity and efficiency. Two separate outputs powered by one low-speed diesel engine delivers up to 280 amps of output per operator.

WIRELESS REMOTE COMPATIBLE

See page 113. Wireless antenna kit (#300 749) recommended.

Two superior arcs in one compact package. See CST 280 (page 50) for additional details.

Save fuel, reduce maintenance costs and increase productivity.

Quiet operation. At 72.2 decibels (97 Lwa) under full load, it's quieter than most single-operator models. Improves jobsite communication and safety.

Vandalism lockout kit (not shown). Lockable hinged steel panel protects front control and ignition switch.

Simple-to-operate **process selector knob automatically sets proper DIG setting** on E6010 and E7018 electrodes providing superior stick performance.

Lift-Arc™ start for TIG starts without the use of high frequency.

Remote amperage control permits the use of standard and wireless amperage control devices.

Increased efficiency. More arcs and better fuel economy equal increased profits for your business. Estimated savings are 34 percent with a dual-operator unit versus two single-operator units.

Heavy industrial ● CC DC

Processes

- Stick (SMAW) ▪ TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 3/16 in. carbons, capable 1/4 in. carbons)

Diesel engine

EPA Tier 4 Final

Mitsubishi S4L2: 24.7 hp at 1,800 rpm Four-cylinder, industrial, liquid-cooled

Note: Engine is warranted separately by engine manufacturer.

Most popular accessories

- Spectrum® 875 (pg 82)
- Full KVA Adapter Cord #300 517 (pg 108)
- Single-Phase Full KVA Plug Kit #119 172 (pg 108)
- Protective Cover #195 301 (pg 108)
- Wireless Remote Hand Control/ Wireless Antenna Kit #300 430/#300 749 (pg 113)
- Spark Arrestor Kit #195 012

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Diesel

Stock Number	Process	Output Mode	Amperage Range	Rated Output at 122°F (50°C)	Single-Phase Generator Power at 122°F (50°C)	Dimensions	Net Weight
(#907 477) Mitsubishi	DC stick/TIG	Separate (dual outputs)	5–225 A (each side) 5–280 A (one side only)	175 A at 27 V, 100% duty cycle	Continuous: 10,000 watts	H: 32 in. (813 mm) W: 26.25 in. (667 mm) D: 56 in. (1,422 mm)	1,064 lb. (483 kg)
		Paralleled (combined)	10–450 A	350 A at 27 V, 100% duty cycle			

Big Blue® 700 Duo Pro

See literature no. ED/5.6

Complete multiprocess and multioperator welder/generator in one rugged package. Up to 400 amps of output per operator can be paralleled with a single switch to provide up to 800 amps of power.

WIRELESS REMOTE COMPATIBLE

See page 113. Wireless Antenna Kit (#300 749) recommended.

Two independent pipe quality arcs in one compact package.

Multiprocess CC/CV provides independent operator controls and the best stick, flux-cored and TIG performance available with no interaction.

Easy arc starts and better arc control for best-in-class performance.

Quiet operation. At 74.7 decibels (99.5 Lwa) under full load, it's quieter than many single-operator models. Improves jobsite communication and safety.

Independent remote control connections allow the use of standard and wireless volt/amperage control devices for each operator.

Compatible with Big Blue® 350 PipePro® system components (see page 73).

Standard features include oil pan heater, intake manifold heater, output paralleling switch and automatic idle.

Increased efficiency. More arcs and better fuel economy equal increased profits for your business. Estimated savings are 34 percent with a dual-operator unit versus two single-operator units.

Heavy industrial ● CC/CV DC

Processes

- Stick (SMAW) ▪ MIG (GMAW)
- Flux-cored (FCAW) ▪ TIG (GTAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 3/8 in. carbons)

Diesel engine

EPA Tier 4i

Deutz D2011L04i: 48.6 hp at 1,800 rpm Four-cylinder, industrial, air/oil-cooled

Note: Engine is warranted separately by engine manufacturer.

Most popular accessories

- SuitCase® X-TREME™ 8VS/12VS (pg 42)
- Full KVA Adapter Cord #300 517 (pg 108)
- Full KVA Plug Kit (pg 108) #119 172 Single-phase #254 140 Three-phase
- Protective Cover #194 683 (pg 108)
- Wireless Remote Hand Control/ Wireless Antenna Kit #300 430/#300 749 (pg 113)
- Spark Arrestor Kit #195 012

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Diesel

Stock Number	Process	Output Mode	Amp/Volt Ranges	Rated Output at 104°F (40°C)	Generator Power at 104°F (40°C)	Dimensions	Net Weight
(#907 461) Deutz	DC stick/TIG/ MIG/FCAW	Separate (dual outputs)	20–400 A 14–40 V	300 A at 28 V, 100% duty cycle 400 A at 36 V, 40% duty cycle	Single-phase: 4,000 watts continuous **Additional generator power** Three-phase: 20,000 watts continuous **or** Single-phase: 12,000 watts continuous	H: 43 in. (1,092 mm) W: 28.5 in. (724 mm) D: 65.125 in. (1,654 mm)	1,729 lb. (784 kg)
		Paralleled (combined)	40–800 A 14–40 V	500 A at 34 V, 100% duty cycle 700 A at 24 V, 60% duty cycle			

Big Blue® 800 Series

See literature no. ED/14.0

The most powerful lineup of diesel welder/generators in the industry. All offer robust output for welding and power generation, and are ideal for dual-operator applications on labor intensive jobsites, or jobsites with limited space.

Big Blue 800 Duo Pro

NEW!

Big Blue 800 Duo Pro SF

Big Blue 800 Duo Air Pak

CA model NOT available for sale in the USA!

WIRELESS REMOTE COMPATIBLE

See page 113. Wireless Antenna Kit (#300 749) recommended.

Multi-arc welding. One dependable engine – two independent arcs with up to 400 amps each. Or plug in additional inverters for a true multioperator work platform! Example: Two additional XMT machines equals four operators, up to 200 amps each. Premium quality arcs allow operators to work independently with no arc interaction. Multioperator welding has never been easier or more versatile.

Ingersoll Rand ultra-reliable industrial rotary screw compressor (Air Pak model only). 30,000-hour life expectancy. Independent on/off control for applications not requiring compressed air – allows greater fuel savings and longer compressor service intervals.

Smart feeder compatible (SF model only). Advanced RMD® and pulsed MIG processes are now available in an engine-driven welder/generator. Discover increased productivity, quality, and improved efficiency in field welding with the new Big Blue 800 Duo Pro SF with FieldPro™ Smart Feeder.

Low OCV stick (VRD) reduces the open-circuit voltage to 15 volts when the welding power source is not in use, increasing operator safety without compromising arc starts.

**Big Blue 800 Duo Air Pak has welder truck specific models available – visit MillerWelds.com or your distributor.*

Auto Remote Sense™ (ARS) detects if a remote control is plugged into the 14-pin receptacle and eliminates confusion of a remote/panel switch.

Electronic engine display simultaneously displays fuel level, engine hours, coolant temperature, oil pressure, battery volts and engine rpm. Also tracks oil change intervals and displays engine diagnostics for easier servicing. Air Pak model adds air pressure and compressor hours displays.

Increased efficiency. More arcs and better fuel economy equal increased profits for your business. Estimated savings are 34 percent with a dual-operator unit versus two single-operator units.

Infinite arc control allows the arc characteristics to be changed for specific applications in stick, MIG and flux-cored welding.

Thermal overload protection prevents machine damage if the duty cycle is exceeded or airflow is blocked.

Standard features include digital weld meters, automatic idle, 120-volt block heater, lockout/tagout battery disconnect switch and vandalism lockout (protects control panel and receptacles, see photo at right).

Heavy industrial

CC/CV DC

Processes

- Stick (SMAW) ▪ MIG (GMAW)
- Flux-cored (FCAW) ▪ DC TIG (GTAW)
- RMD* ▪ Pulsed MIG (GMAW-P)*
- Air carbon arc cutting and gouging (CAC-A) (rated 1/2 in. carbons)
- Stud (1/2 in.)

**Big Blue 800 Duo Pro SF model only.*

Diesel engines

EPA Tier 4 Final models
Deutz TD2.9 L4
65.7 hp at 1,800 rpm
Turbo-charged, four-cylinder, industrial, liquid-cooled

EPA Tier 4i CA model
Deutz TD2011L04i
63.4 hp at 1,800 rpm
Turbo-charged, four-cylinder, industrial, air/oil-cooled

Note: Engines are warranted separately by engine manufacturer.

Most popular accessories

- FieldPro™ Smart Feeder (Duo Pro SF model only) #300 935 (pg 38)
- SuitCase® X-TREME™ 8VS/12VS (pg 42)
- Full KVA Adapter Cord #300 517 (pg 108)
- Full KVA Plug Kit (pg 108)
  #119 172 Single-phase
  #254 140 Three-phase
- Protective Cover #301 113 (pg 108)
- Wireless Remote Hand Control/ Wireless Antenna Kit #300 430/#300 749 (pg 113)

- **Desiccant Air Dry System (Air Pak only)**
  #195 117 Side mount
  #195 117 001 Rear mount
  Eliminates moisture in the air stream and prevents air line freeze-ups in cold climates.
- Spark Arrestor Kit #195 012

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Diesel

Model/Stock Number*	Welding Mode/Process	Output Mode	Amp/Volt Ranges	Rated Output at 100% Duty Cycle at 104°F (40°C)	Generator Power at 104°F (40°C)	Dimensions	Net Weight
Tier 4 Final **Big Blue 800 Duo Pro (#907 587)** Deutz **Big Blue 800 Duo Pro SF (#907 587 002)** Deutz **Big Blue 800 Duo Pro SF (#951 655)** Deutz with FieldPro smart feeder and MIG gun **Big Blue 800 Duo Air Pak (#907 535)** Deutz **Tier 4i Big Blue 800 Duo Air Pak CA model (NOT available for sale in the USA) (#907 634)** Deutz	CC/DC (Stick/TIG)	Separate (dual outputs)	20–400 A	400 A at 36 V (each side)	Three-phase Peak: 27,000 watts Continuous: 20,000 watts Single-phase Peak: 15,000 watts Continuous: 12,000 watts	H: 46 in. (1,168 mm) W: 28.5 in. (724 mm) D: 69.5 in. (1,765 mm)	**Duo Pro** 1,869 lb. (848 kg) **Duo Pro SF** 1,930 lb. (875 kg) **Duo Air Pak** 2,095 lb. (968 kg)
		Paralleled (combined)	40–800 A	700 A at 44 V, 800 A at 38 V			
	CV/DC (MIG/FCAW)	Separate (dual outputs)	14–40 V	400 A at 34 V (each side)			
		Paralleled (combined)	14–40 V	750 A at 40 V, 800 A at 38 V			

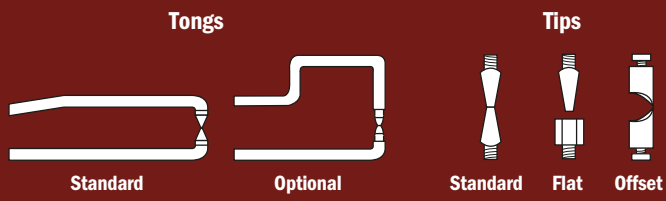
Ingersoll Rand CE55 G1 Air Compressor (Air Pak only)	Features	Free Air Delivery	Working Pressure Constant	Duty Cycle	Oil Capacity	Automatic Compressor Shutdowns
	Rotary screw with electric clutch for on/off, oil change intervals of 500 hours, life expectancy of 30,000 hours	Idle: 40 cfm (1.13 m^3/min.) Weld: 60 cfm (1.70 m^3/min.)	100 psig (7 bar)	100%	4 qt. (3.79 L)	Oil temperature

For more detailed information, visit **MillerWelds.com/spotwelders**

Spot Welders

Tongs and tips. Miller offers a wide variety of both symmetrical and asymmetrical tong and tip configurations. Maximum capabilities of spot welders are obtained with minimum tong lengths. Tips are made of durable Class 2, long-wearing copper alloy.

See literature no. SW/1.0 for full range of tongs and tips.



Air-Cooled Spot Welders

See literature no. SW/1.0

MSW and LMSW Series lightweight, air-cooled units are portable, easy to operate, and provide a quick and effective means for spot welding mild, galvanized or stainless materials.

"T" models include timer panel with a 0 to 5 second weld timer and power on/off switch. Timer panel can be mounted on the optional SWP-2 pedestal or any other convenient location. Includes 10-foot (3 m) input power and interconnecting cords.

Hand lever locks tongs firmly on material, ensuring positive, accurate fit-up.

Accommodates a wide variety of tongs and tips (ordered separately).

Quick and easy adjustment for material thickness.

Reversible for left- or right-hand operation.

**Tongs and tips must be ordered separately – see literature no. SW/1.0 for full range of tongs and tips.*

1 Phase

Process

- Resistance Spot Welding

Note: Not recommended for welding aluminum, copper or copper alloys.

Most popular accessories

- **Gyro Bail** #041 979

  Supports weight of welder. Operates with boom and counterweight or from spring-loaded cable (sold separately). Spot welds in any position.
- Spot Welder Pedestal #040 872

Note: Tongs/tips must be ordered separately. One standard set of tips is supplied with each set of tongs; see diagram above.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model/Stock Number*	Input Power	Work Capacity *(Combined thickness uncoated mild steel using 6 in. [152 mm] tongs)*	Rated Output	Rated Output Calibrated with Standard-Type Tongs 6 in. (152 mm)	12 in. (305 mm)	18 in. (457 mm)	Max Open-Circuit Voltage	Dimensions	Net Weight
MSW-41 (#900 371) **MSW-41T (#901 345)** with timer	110 V, 30 A, 50/60 Hz	1/8 in. (3.2 mm) or two pieces of 20 ga. (1.8 mm) galvanized steel	1.5 kVA at 50% duty cycle	5,550 A	4,500 A	3,600 A	1.6 VAC	H: 6 in. (152 mm) W: 3.75 in. (95 mm) D: 13 in. (330 mm)	22 lb. (10 kg) 34 lb. (15 kg) with timer
LMSW-52 (#900 377) **LMSW-52T (#901 357)** with timer	220 V, 30 A, 50/60 Hz	3/16 in. (4.7 mm) or two pieces of 16 ga. (3.0 mm) galvanized steel	2.5 kVA at 50% duty cycle	6,750 A	5,800 A	4,850 A	2.5 VAC	H: 6 in. (152 mm) W: 3.75 in. (95 mm) D: 16 in. (406 mm)	30 lb. (14 kg) 42 lb. (19 kg) with timer

MillerWeldsStore.com

Buy Miller® Gear Online. **Shirts, hats, mugs, banners and more!**

Submerged Arc

For more detailed information, visit **MillerWelds.com/subarc**

Miller offers an array of versatile Submerged Arc components, including power sources, controls, wire drives, torches, tractors and a variety of other accessories.

SubArc Digital Series

See literature no. AD/7.3

The SubArc Digital Series of power sources, interface controls and accessories include digital control and communication electronics designed to improve weld performance and simplify the integration of the equipment in more advanced applications.

SubArc DC 650 Digital *SubArc DC 1000 Digital* *SubArc AC/DC 1000 Digital*

Low-voltage accessory operation and improved environmental protection. The Digital Series accessories are powered with 24 VAC control voltage from the power source. All power sources, interface controls and wire drives are IP-23 rated providing a high level of protection for harsh environments.

Easy to integrate. Our SubArc power sources are easy to integrate by using a standard Modbus® connection.

All power sources also feature thermal overload protection, line voltage compensation and Fan-On-Demand™.

Two DC power source models and one AC/DC power source model. Power sources have sufficient power capacity to cover applications from traditional DC single-arc to multi-wire tandem welding. In the case of electroslag welding or other high-current demand, two or more power sources can easily be paralleled (both DC and AC/DC machines).

**While idling.*

Heavy industrial

CC CV AC DC DC 3 Phase *SubArc DC Series is DC only.*

Processes

- Submerged arc (SAW)
- Electroslag (ESW)
- Air carbon arc cutting and gouging (CAC-A)

Most popular accessories

- 15 ft. (4.6 m) SubArc Parallel Cable #260 775 015 (pg 111)
- 15 ft. (4.6 m) SubArc Tandem Cable #260 878 015 (pg 111)
- 14-pin Insight Core Module #301 072 (requires Insight Core to SubArc Digital Series Adapter Kit #301 295)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model/Stock Number	Amperage Range (CC Mode)	Voltage Range (Subarc Mode)	Rated Output	Amps Input at Rated Output, 60 Hz 230 V	460 V	575 V	KVA	KW	Max Open-Circuit Voltage	Dimensions *(Includes lift eye, but not strain relief)*	Net Weight
SubArc DC 650 Digital (#907 622) 230/460/575 V	50–815 A	20–44 V	650 A at 44 V, 100% duty cycle	126 3.8*	63 1.9*	50.4 1.4*	50 1.52*	34.8 0.76*	75 Vpk	H: 30 in. (762 mm) W: 23 in. (584 mm) D: 38 in. (965 mm)	593 lb. (269 kg)
SubArc DC 1000 Digital (#907 624) 230/460/575 V	100–1,250 A	20–44 V	1,000 A at 44 V, 100% duty cycle	180 5.8*	90 2.9*	72 2.4*	73 3.2*	53 0.5*	68 Vpk		682 lb. (309 kg)
SubArc AC/DC 1000 Digital (#907 620) 460 V	300–1,250 A	20–44 V	1,000 A at 44 V, 100% duty cycle	– –	122 3.0*	– –	98 2.37*	53 0.95*	93 Vpk	H: 43 in. (1,092 mm) W: 28 in. (711 mm) D: 48 in. (1,219 mm)	1,187 lb. (538 kg)

SubArc Interface Controls

See literature no. AD/7.3

SubArc Interface Digital

SubArc Interface Analog

Easier setup and operation. The SubArc Digital Series Interface controls recognize the power source and wire drive connected, and automatically configure the system for proper operation.

Internal terminal strip is able to integrate with positioners, sidebeams, turning rolls and other peripheral equipment.

Most popular accessories

- SubArc Control Cables (pg 111)
  - #260 622 030 30 ft. (9 m)
  - #260 622 050 50 ft. (15 m)
  - #260 622 080 80 ft. (24.4 m)
  - #260 622 100 100 ft. (30.5 m)
  - #260 622 120 120 ft. (36.6 m)
  - #260 622 200 200 ft. (61.0 m)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Model/Stock Number	Input Power from Welding Power Source	Welding Power Source Type	Dimensions	Net Weight
SubArc Interface Digital (#300 936)	24 VAC, 1-phase, 25 A, 50/60 Hz	Constant voltage (CV), AC or DC, with remote contactor and output control capabilities	H: 7 in. (178 mm) W: 11.25 in. (286 mm) D: 11.5 in. (292 mm)	18 lb. (8.2 kg)
SubArc Interface Analog (#300 937)	24 VAC, 1-phase, 25 A, 50/60 Hz	Constant current (CC), constant voltage (CV), DC, with remote contactor and output control capabilities		

SubArc Wire Drive Assemblies

See literature no. AD/7.3

SubArc Strip Drive 100 Digital Low Voltage

SubArc Wire Drive 400 Digital Low Voltage

SubArc Strip Drive 100 Digital Low Voltage is a heavy-duty, right-angle drive assembly designed for automated strip clad applications.

SubArc Wire Drive 400 and 780 Digital Low Voltage are right-angle wire drive assemblies. The 400 model is standard speed and the 780 is high speed.

**Includes adapter plate allowing mounting to 2.5-, 4.25-, and 4.625-inch bolt-hole patterns.*

Model	Stock Number	Input Power	Input Power Cord	Rating	Wire Feed Speed	Wire Diameter Capacity	Net Weight
SubArc Strip Drive 100 Digital Low Voltage	**(#300 939)** Drive only **(#300 940)*** With mounting bracket	38 VDC	4 ft. (1.2 m)	1/5 hp, 21 rpm	10–69 ipm (0.3–1.6 m/min.)	N/A (strip cladding applications)	20 lb. (9.1 kg)
SubArc Wire Drive 400 Digital Low Voltage	**(#300 938)*** Standard speed **(#300 938 001)** Standard speed, for use with tractor	38 VDC	4 ft. (1.2 m)	1/5 hp, 85 rpm	30–400 ipm (0.8–10.2 m/min.)	3/32–3/16 in. (2.4–4.8 mm)	33 lb. (15 kg)
SubArc Wire Drive 780 Digital Low Voltage	**(#300 941)*** High speed	38 VDC	4 ft. (1.2 m)	1/4 hp, 143 rpm	50–780 ipm (1.3–19.8 m/min.)	1/16–1/8 in. (1.6–3.2 mm)	33 lb. (15 kg)

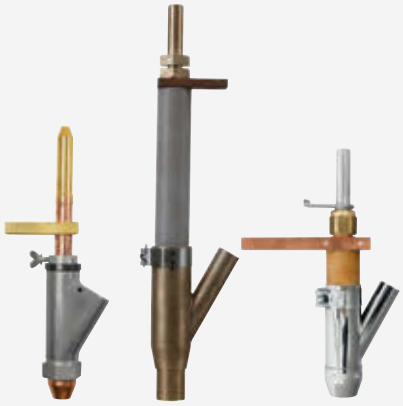
Most popular accessories

- Motor Extension Cables (pg 111)
  #254 232 005 5 ft. (1.5 m)
  #254 232 010 10 ft. (3 m)
  #254 232 025 25 ft. (7.6 m)
  #254 232 065 65 ft. (19.8 m)
- Single-Wire Straightener #199 733 (pg 111)
- Twin-Wire Straighteners (for Twin-Wire torches only) (pg 111)
  #301 160 Single adjustment
  #301 162 Double/separate adjustment
- Drive Rolls (pg 111)
- Manual Slides (pg 111)
  #301 137 Single slide
  #301 138 Cross slide

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

SubArc Torches

See literature no. AD/7.3



OBT 600 *OBT 1200* *1200-Amp Twin-Wire*

OBT 600 (#043 923) is a 600-amp, 100 percent duty cycle torch with concentric flux flow nozzle. Can be used with 1/16–3/16 inch (1.6–4.8 mm) wire.

OBT 1200 (#043 900) is a 1,200-amp, 100 percent duty cycle torch with concentric flux flow nozzle. Can be used with 1/16–3/16 inch (1.6–4.8 mm) wire. OBT 1200 features a replaceable breakaway adapter end to prevent costly damage should torch run into an obstruction.

1200-Amp Single-Wire Torch (#301 141 short)
1200-Amp Twin-Wire Torch (#301 143 short, #301 144 long)
Both of the short torches are 11.3 inches (288 mm) in length and the long torch is 16.8 inches (427 mm). The single-wire torch uses 1/16–5/32 inch (1.6–4.0 mm) consumables and the twin-wire torches use 3/64–3/32 inch (1.2–2.4 mm) consumables.

Most popular accessories

- OBT 600 Torch Body Extensions (pg 111)
  #043 967 1 inch (25.4 mm)
  #043 969 2 inch (50.8 mm)
  #043 973 4 inch (101.6 mm)
  #043 975 6 inch (152.4 mm)
- OBT 1200 Torch Body Extension #043 981 (pg 111)
- Contact Tips (pg 111)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

SubArc Flux Hopper

See literature no. AD/7.3

Improved flux delivery system. Our SubArc Flux Hopper Digital Low Voltage utilizes a flux valve mechanism that assures continuous delivery of flux to the arc.

Sight glass allows the weld operator to visually monitor the remaining flux in the hopper.

Versatile opening is sized to allow hook-up of any flux-hopper-mounted recovery system.

Includes slag screen to capture fused slag particles from entering the flux hopper.

Model/Stock Number	Input Power	Input Power Cord	Flux Capacity	Net Weight
SubArc Flux Hopper Digital Low Voltage (#300 942)	12 VDC (PWM signal from SubArc Interface)	11 ft. (3.3 m)	25 lb. (11 kg)	23 lb. (10.4 kg)

Most popular accessories

- Flux Hopper Extension Cables (pg 111)
  #260 623 010 10 ft. (3 m)
  #260 623 025 25 ft. (7.6 m)
  #260 623 065 65 ft. (19.8 m)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Submerged Arc

SubArc Tractor

See literature no. AD/7.5

Digital weld controller package shown.

Designed and built to provide maximum reliability in the toughest conditions. This simple-to-use self-propelled submerged arc welding tractor can easily connect to SubArc DC or AC/DC Digital power supplies.

Vertical, horizontal and rotary torch adjustment allows for greater access to hard-to-reach spots.

Heavy-duty, four-wheel, chain-driven trackless operation with rubber wheels provides superior and reliable mobility.

Manual clutch enables freewheeling movement of the tractor.

Travel speed is precisely controlled by a closed-loop microprocessor control with tach feedback.

Packages include

- SubArc Tractor with remote start/stop control and guide rolls
- SubArc Interface weld controller (analog or digital)
- SubArc Wire Drive 400 for Tractor
- 25 lb. (11.3 kg) capacity flux hopper with valve
- 60 lb. (27 kg) wire reel
- OBT 600 torch
- Wire straightener

Most popular accessories

- SubArc Control Cables (pg 111)
- Contact Tips (pg 111)
- Drive Rolls (pg 111)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Input Power from Welding Power Source	Wire Feed Speed	Wire Diameter Capacity	Gun Positioning Slides	Drive Motor	Travel Speed	Dimensions	Net Weight
(#951 614) with SubArc Interface Digital **(#951 615)** with SubArc Interface Analog	24 VAC, 1-phase, 50/60 Hz, 200 watts	30–400 ipm (0.8–10.2 m/min.)	1/16–3/16 in. (1.6–4.8 mm)	4 in. (101.6 mm) vertical and horizontal	24 VDC permanent magnet gear motor	4–66 ipm (10–168 cm/min.)	H: 43.375 in. (1,102 mm) W: Varies depending on system configuration D: 35.5 in. (903 mm)	162 lb. (73 kg) without flux or wire

SubArc Portable Welding System

See literature no. AD/7.6

NEW!

Available 1st quarter!

SubArc DC 650 Digital portable system shown.

Self-contained system for pressure vessel, pipe and general welding applications. Houses a power source, mast and boom on a mobile platform.

Built-in fork pockets and caster wheels allows welding system to be brought to the joint.

Ease of positioning the weld head through use of integrated motorized mast, manual telescoping boom, cross slides and 360-degree mast rotation.

Motorized mast with pendant control and **manual telescoping boom** provide 44 inches (1,117 mm) of vertical travel and 31 inches (787 mm) of horizontal travel respectively.

Manual cross slides provide 7.87 inches (200 mm) of fine vertical and horizontal torch adjustment.

Systems include

- Portable mast and boom
- SubArc power source
- SubArc Interface Digital and control cable
- SubArc Wire Drive 400 Digital Low Voltage
- 25 lb. (11.3 kg) capacity flux hopper with valve
- 60 lb. (27 kg) wire reel and support assembly
- OBT 600 torch (650 system) or OBT 1200 torch (both 1000 systems)
- Wire straightener
- Manual cross slides

Most popular accessories

- Contact Tips (pg 111)
- Drive Rolls (pg 111)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Stock Number	Supply Voltage	Mast Stroke	Mast Travel	Boom Stroke	Boom Travel	Base Rotation	Minimum Working Height	Maximum Working Height	Overall Height
(#951 675) w/SubArc DC 650 Digital **(#951 676)** w/SubArc DC 1000 Digital **(#951 677)** w/SubArc AC/DC 1000 Digital (See page 78 for power source specs)	120 V, 1-phase, 60 Hz (See page 78 for power source requirement)	44 in. (1,117 mm)	Constant speed	31 in. (787 mm)	Manual	360°	DC 650: 33.5 in. (851 mm) DC 1000: 26.25 in. (667 mm) AC/DC 1000: 26.25 in. (667 mm)	DC 650: 77.5 in. (1,969 mm) DC 1000: 70.25 in. (1,784 mm) AC/DC 1000: 70.25 in. (1,784 mm)	102 in. (2,590 mm)

Miller recommends

HOBART FILLER METALS

Customers count on Hobart® to provide an exceptional level of expertise and commitment in developing unique filler metal and flux solutions with them to meet current and future challenges.

Rely on Hobart for submerged arc applications and all your welding needs.

Visit **HobartBrothers.com** or your local distributor to learn more.

Questions? Hobart is here to help.

MORE on the WEB

For more detailed information, visit
MillerWelds.com/plasmacutters

Plasma Cutters

Plasma Product Guide

	Page	Class	Gouging	Piercing	Rated Output/ Duty Cycle	Rated Cutting Thickness* Mild Steel	Stainless Steel	Aluminum	Max. Sever Thickness Mild Steel	Special Features	Typical Applications	
Spectrum® 375 X-TREME™	82	●		●	30 A at 35%	3/8 in.	3/8 in.	1/4 in.	5/8 in.	Auto-Line™: 120–240 V, MVP™ plugs, Auto-Refire,™ automatic air regulation, only 19 lb., XT30 torch	HVAC, maintenance, light construction, hobbyist, auto restoration, fabrication	1-Phase
Spectrum® 625 X-TREME™	82	●	●	●	40 A at 50%	5/8 in.	1/2 in.	3/8 in.	7/8 in.	Auto-Line™: 120–240 V, MVP™ adapters, Auto-Refire,™ automatic air regulation, only 21 lb., XT40 or XT40M torch	Maintenance, light construction, body shops, prototyping	1-Phase
Spectrum® 875	82	●	●	●	60 A at 50%	7/8 in.	7/8 in.	5/8 in.	1-1/4 in.	Auto-Refire,™ automatic air regulation, only 49 lb., XT60 or XT60M torch	Construction, maintenance/repair, fabrication	1-Phase
Spectrum® 875 Auto-Line™	82	●	●	●	208: 60 A at 40% 230–380 V: 60 A at 50% 380–575 V: 60 A at 60%	7/8 in.	7/8 in.	5/8 in.	1-1/4 in.	Auto-Line™: 208–575 V, Auto-Refire,™ automatic air regulation, only 54 lb., XT60 or XT60M torch	Construction, maintenance/repair, fabrication	1&3-Ph

Engine-Driven Welder/Generator	Continuous Generator Power	Spectrum 375 X-TREME Steel Cut / Output Amp Setting**	Spectrum 625 X-TREME Steel Cut / Output Amp Setting**	Spectrum 875 / 875 Auto-Line Steel Cut / Output Amp Setting**	
Blue Star® 185	6.2 kW	3/8 in. / 30 A	Not recommended	Not recommended	Cutting w/Engine Drives
Bobcat™ and Trailblazer®	9.5/10.5 kW	3/8 in. / 30 A	5/8 in. / 40 A	1/2 in. / 45 A	Cutting w/Engine Drives
Big Blue® 350 PipePro,® 400 Pro and 450 Duo CST™	10 kW	3/8 in. / 30 A	5/8 in. / 40 A	1/2 in. / 45 A	Cutting w/Engine Drives
Big Blue® 500 Pro	1-ph: 12 kW, 3-ph: 15 kW	3/8 in. / 30 A	5/8 in. / 40 A	5/8 in. / 50 A	Cutting w/Engine Drives
Big Blue® 600 Pro, 800 Duo Pro and 800 Duo Air Pak™	1-ph: 12 kW, 3-ph: 20 kW	3/8 in. / 30 A	5/8 in. / 40 A	7/8 in. / 50 A	Cutting w/Engine Drives

***Note on cut capacity ratings:** The Spectrum Series rating system is designed to provide a guide to help our customers choose the right machine for their application. Rated cut capacity is based on traveling approximately 15 inches per minute to achieve a steady, precise cut. This is the key rating that should meet or exceed your typical cutting thickness requirements. Sever cut is the maximum cut achieved in ideal conditions. Some factors that dictate actual cut speeds, thickness capacity and duty cycles are: types of thermally conductive material being cut, available input power, output power settings and operator technique. For aluminum and other metals with high thermal conductivity, cutting capacities may be derated as much as 30 percent.

Product Key

Class: ● **Light Industrial** ● **Industrial** ● **Heavy Industrial** **Capability:** ● **Designed for this process** ◉ **Capable of this process**

*See note on cut capacity ratings above. **240 V, full KVA plug. Derate cut capacity with less generator power.

For more detailed information, see individual specification sheets.

Spectrum® Series

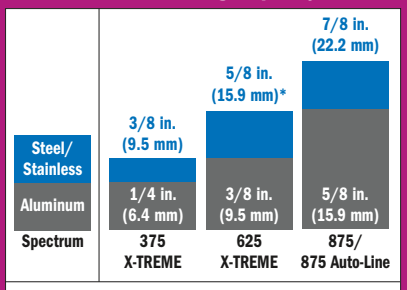
Plasma Cutters

Our Spectrum line of plasma cutters provides big cutting power in portable packages and with features like flexible cables and Auto-Refire technology they are better than ever. Step up to Spectrum 625 X-TREME™ or 875/875 Auto-Line™ models to add Ultra-Quick Connect hand-held torches and machine torch capabilities.

Spectrum Features

Feature	375 X-TREME	625 X-TREME	875	875 Auto-Line
Auto-Line (120–240 V)	●	●		
Auto-Line (208–575 V)				●
MVP™ plugs/adapters	●	●		
Ultra-Quick Connect torch with flexible cable		●	●	●
Quick connect flexible work cable with clamp	●	●	●	●
Built-in gas/air filter and regulator	●	●	●	●
Auto-Refire	●	●	●	●
Auto postflow	●	●	●	●
Auto air regulation	●	●	●	●
X-CASE™	●	●		
Machine torch capable		●	●	●

Steel/Stainless/Aluminum Rated Cutting Capacity



*Stainless: 1/2 in. (12.7 mm) for Spectrum 625 X-TREME.

Cut capacity ratings are based on traveling speed of approximately 15 inches per minute to achieve a precise cut. This is the key rating that should meet or exceed your typical cutting thickness requirements. Factors that can affect actual cut speeds, thickness capacity and duty cycles are: types of thermally conductive material being cut, available input power, output power settings and operator technique. For highly thermal conductive metals such as aluminum, cutting capacities may be reduced up to 30 percent compared to mild steel.

Spectrum 375 X-TREME *Spectrum 625 X-TREME* *Spectrum 875* *Spectrum 875 Auto-Line*

Power factor correction (PFC). Uses less energy by utilizing input power more efficiently and increases productivity by reducing nuisance circuit breaker trips.

LED indicators for easy troubleshooting.

Non-high-frequency arc starting does not interfere with or damage controls or computers.

Postflow cooling circuitry extends life of the consumable and torch by cooling them with postflow air after trigger is released.

Auto-Refire™ provides ultimate convenience by automatically controlling the pilot arc when cutting expanded metal or multiple pieces of metal.

Built-in gas/air filter and regulator. Provides air filtration of airborne particles five microns and larger. Additional filtration and water separation recommended.

LVC™ **line voltage compensation** provides peak performance power under variable input voltage conditions for clean, steady cuts.

Wind Tunnel Technology™ prevents abrasive dust and particles from damaging internal components.

Fan-On-Demand™ cooling system only operates when needed, reducing the amount of airborne dust/dirt pulled through the unit.

Quick connect flexible work cable with heavy-duty clamp.

Spectrum 625 X-TREME and 875/875 Auto-Line hand-held and machine torches

Ultra-Quick Connect™ **hand-held torches with flexible cables.** XT40 (625 X-TREME) and XT60 (875 models) hand-held torches feature quick torch connection, ergonomic handles to help prevent operator fatigue and flexible cables that make maneuvering easier.

Machine torch capable. 625 X-TREME and both 875 models can be ordered with a machine torch or can be converted to use a machine torch with optional automation kits (page 110).

Long and short body machine torches. XT40M (625 X-TREME) and XT60M (875 models) machine torches are available in long or short body configurations. XT60M is also available in 25- or 50-foot cable lengths.

Models/ packages

Spectrum 375 X-TREME hand-held torch package (#907 529) shown.

Spectrum 875 Auto-Line machine torch package (#907 584 002) shown.

Model	Hand-Held Torch Packages			Machine Torch Packages			
				25 ft. (7.6 m)		50 ft. (15.2 m)	
	12 ft. (3.7 m)	20 ft. (6.1 m)	50 ft. (15.2 m)	Long Body	Short Body	Long Body	Short Body
Spectrum 375 X-TREME	(#907 529)	–	–	–	–	–	–
Spectrum 625 X-TREME	(#907 579)	(#907 579 001)	–	(#907 579 002)	(#907 579 003)	–	–
Spectrum 875	–	(#907 583)	(#907 583 001)	(#907 583 002)	(#907 583 003)	–	–
Spectrum 875 Auto-Line	–	(#907 584)	(#907 584 001)	(#907 584 002)	(#907 584 003)	(#907 584 004)	(#907 584 005)

Spectrum® 375 X-TREME™/625 X-TREME™

See literature no. PC/9.2 (375 X-TREME) and PC/9.6 (625 X-TREME)

AUTOLINE Power Management Technology Allows for any input voltage hook-up (120–240 V, single-phase, 50/60 Hz for 375 X-TREME and 60 Hz for 625 X-TREME) with no manual linking, providing convenience in any job setting.

X-CASE™ provides the ultimate protection during transport and storage. Additional space is ideal for MVP plugs, consumables box, gloves, etc.

Multi-voltage plug (MVP™) on 375 X-TREME or MVP™ adapter on 625 X-TREME allows connection to 120- or 240-volt receptacles without tools.

Automatic air regulation compensates for input pressure variation to provide constant recommended torch pressure for optimum cutting performance.

Automatic gouging consumable detection (625 X-TREME only). Detects gouging consumable and adjusts gas pressure to optimize performance, eliminating the need for a manual regulator.

Spectrum 625 X-TREME shown.

375 X-TREME model includes XT30 hand-held torch with ergonomic design and flexible cable.

625 X-TREME model includes Ultra-Quick Connect™ XT40 hand-held torch with ergonomic design and flexible cable; or **XT40M long body or short body machine torch.**

Spectrum® 875/875 Auto-Line™

See literature no. PC/9.8

AUTOLINE Power Management Technology **Spectrum 875 Auto-Line model** allows for any input voltage hook-up (208–575 V, single- or three-phase) with no manual linking, providing convenience in any job setting. *Standard Spectrum 875 model operates on 208/230 V, single-phase input voltage only.*

Consumables storage compartment provides convenient access to consumables and parts.

Automatic air regulation compensates for input pressure variation to provide constant recommended torch pressure for optimum cutting performance.

Spectrum 875 shown.

Includes Ultra-Quick Connect™ XT60 hand-held torch with ergonomic design and flexible cable; or **XT60M long body or short body machine torch.**

Model	Input Power	Rated Output at 104°F (40°C)	Amps Input at Rated Output	KVA	KW	Compressor Requirement	Dimensions	Net Weight with Torch
Spectrum 375 X-TREME 120–240 V, 50/60 Hz	Single-phase	120 V (15 A): 20 A at 88 VDC, 35% duty cycle	18.1	2.2	2.1	5.0 cfm (142 L/min.) at 90 psi (621 kPa)	H: 9 in. (229 mm) W: 5.5 in. (140 mm) D: 13.25 in. (337 mm)	19 lb. (8.6 kg)
		120 V (20 A): 27 A at 91 VDC, 20% duty cycle	25.6	3.1	3.0			
		240 V: 30 A at 92 VDC, 35% duty cycle	13.6	3.3	3.1			
Spectrum 625 X-TREME 120–240 V, 60 Hz	Single-phase	120 V (15 A): 20 A at 88 VDC, 35% duty cycle	18.1	2.2	2.1	6.0 cfm (170 L/min.) at 90 psi (621 kPa)	H: 9 in. (229 mm) W: 5.5 in. (140 mm) D: 13.25 in.(337 mm)	**12 ft.** 21 lb. (9.5 kg) **20 ft.** 23 lb. (10.5 kg) **25 ft.** 24 lb. (10.7 kg)
		120 V (20 A): 27 A at 91 VDC, 20% duty cycle	25.6	3.0	2.9			
		240 V: 40 A at 140 VDC, 50% duty cycle	13.6	6.4	6.3			
Spectrum 875 208/230 V, 50/60 Hz	Single-phase	208 V: 60 A at 140 VDC, 40% duty cycle 230 V: 60 A at 140 VDC, 50% duty cycle	208 V: 47 230 V: 42	9.9	9.8	6.75 cfm (191 L/min.) at 90 psi (621 kPa)	H: 13.5 in. (343 mm) W: 8.75 in. (222 mm) D: 18.5 in. (470 mm)	**20 ft.** 49 lb. (22.2 kg) **50 ft.** 58 lb. (26.3 kg)
Spectrum 875 Auto-Line 208–575 V, 50/60 Hz	Three-phase	208 V: 60 A at 140 VDC, 40% duty cycle 230–380 V: 60 A at 140 VDC, 50% duty cycle 380–575 V: 60 A at 140 VDC, 60% duty cycle 380–575 V: 50 A at 140 VDC, 100% duty cycle	208 V: 27.5 230 V: 25 380 V: 15 460 V: 12.4 575 V: 9.8	9.9	9.4			**20 ft.** 54 lb. (24.5 kg) **25 ft.** 56 lb. (25.4 kg) **50 ft.** 63 lb. (28.6 kg)
	Single-phase	208 V: 60 A at 140 VDC, 40% duty cycle 230 V: 60 A at 140 VDC, 40% duty cycle 230 V: 50 A at 140 VDC, 100% duty cycle	208 V: 47.4 230 V: 42.2	9.9	9.7			

Light industrial ● *375/625 models*
Industrial ● *875 models*

DC 3 Phase 1 Phase *Only 875 Auto-Line has 3-phase capabilities.*

Processes

- Air plasma cutting
- Air plasma gouging (625/875 models)

375 X-TREME comes complete with

- XT30 hand-held torch with 12 ft. (3.7 m) cable
- Heavy-duty work clamp with 12 ft. (3.7 m) flexible cable
- 10 ft. (3 m) power cord with MVP 5-15P (120 V, 15 A) and 6-50P (240 V, 50 A) plugs
- X-CASE for protection and storage
- Shoulder strap
- Consumables box with two electrodes, two tips, deflector and air fitting

625 X-TREME comes complete with

- XT40 hand-held torch with 12 ft. (3.7 m) or 20 ft. (6.1 m) cable; **OR** XT40M long body or short body machine torch with 25 ft. (7.6 m) cable
- Heavy-duty work clamp and flexible cable with quick connect
- 12 ft. (3.7 m) power cord with 240 V, L6-30P twist lock plug
- MVP adapters with 5-15P (120 V, 15 A) and 6-50P (240 V, 50 A) plugs
- X-CASE for protection and storage
- Shoulder strap
- Consumables box with two electrodes, two 40 A tips and one 30 A tip, 30 A drag shield, deflector and air fitting
- Machine torch packages include corresponding automation kit

875 and 875 Auto-Line come complete with

- XT60 hand-held torch with 20 ft. (6 m) or 50 ft. (15.2 m) cable; **OR** XT60M long body or short body machine torch with 25 ft. (7.6 m) or 50 ft. (15.2 m) cable
- Heavy-duty work clamp and flexible cable with quick connect
- 10 ft. (3 m) power cord
- Extra consumables
- Machine torch packages include corresponding automation kit

Most popular accessories

- Automation Kits (pg 110)
- Cables and Cable Covers (pg 110)
- Cutting Guides (pg 110)
- Filters (pg 110)
- Plugs and Cords (pg 110)
- Protective Covers/Cases (pg 110)
- Torches (pg 110)
- Torch Consumables (pg 110)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Spectrum® Automation-Ready Machines

See literature no. PC/9.6 (625 X-TREME) or PC/9.8 (875 models)

Spectrum 625 X-TREME™ machine torch package (#907 579 002) shown.

Spectrum 875 Auto-Line™ machine torch package (#907 584 002) shown. Spectrum 875 machine torch package also available (without remote pendant control).

Machine torch capable. 625 X-TREME and both 875 models can be ordered with a machine torch (see page 82) or can be converted to use a machine torch with optional automation kits (at right).

Long and short body machine torches. XT40M (for 625 X-TREME) and XT60M (for 875 models) machine torches can be ordered separately (see page 110) and are available in long or short body configurations. XT60M is also available in 25- or 50-foot cable lengths.

Note: Machine torch packages above are shown with long body torches.

Automation Kits

Converts hand-held torch packages to add machine torch capabilities. Machine torches are NOT included in automation kits and must be ordered separately (see page 110).

- **Spectrum 625 X-TREME Automation Kit** #301 158 (pg 110)

Note: Requires a Spectrum 625 X-TREME with Ultra-Quick Connect™ feature for unit to be converted for use with long or short body machine torches.

- **Spectrum 875 Automation Kit** #301 156 (pg 110)

- **Spectrum 875 Auto-Line Automation Kit** #301 157 (pg 110) Includes remote pendant control for manual on/off.

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Regulators

Series 40 Series 30

Heavy-duty and medium-duty single-stage pressure regulators

Our Series 40™ and Series 30™ industrial-grade pressure regulators provide accurate pressure readings for welding, cutting, heating and other applications. Extremely durable construction and simplified design provide consistent gas flow and longer trouble-free operation. Covered by a three-year warranty. See page 87 for optional Hard Hat™ regulator guards designed to help prevent broken gauges.

Also available
Series 30 single-stage regulator twin packs

Stock Number	Gas	Regulator	Max. Delivery Pressure or Flow	Inlet Connection
HTP2	Oxygen	30-100-540	100 psig (7 bar)	CGA 540
	LP or Acetylene	30-15-510	15 psig (1 bar)	CGA 510
HTP5	Oxygen	30-100-540	100 psig (7 bar)	CGA 540
	Acetylene	30-15-300	15 psig (1 bar)	CGA 300

Series 46 Series 36

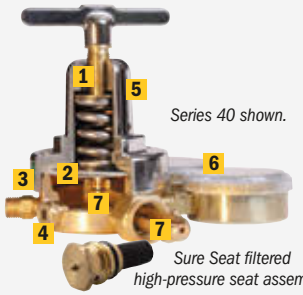
Heavy-duty and medium-duty single-stage station regulators

Our Series 46™ and Series 36™ brass line regulators are rugged, accurate and corrosion-resistant. Station regulators are used to connect pipeline gas delivery systems to the welding stations. Because the pipeline pressure is regulated upstream, station regulators only require a single delivery pressure gauge. Covered by a three-year warranty.

**In the chart below, oxygen "C" size inlet connection CGA 024 (7/8"-14 RH) fits station valve Rego. No. 7160. Fuel gases "C" size inlet connection CGA 025 (7/8"-14 LH) fits station valve Rego. No. 7161. Note: Body inlet is 1/4-inch (6 mm) NPT.*

Two-stage regulators

Series 30 two-stage regulators drop cylinder pressure to working pressure in two stages for consistent and accurate outlet pressure and flow regardless of inlet pressure. Recommended where outlet pressure and flow must be maintained without variation. Covered by a three-year warranty.



Series 40 shown.

Sure Seat filtered high-pressure seat assembly.

1 Resin bonnet insert *(Series 40/46 only)*
Allows smooth, easy adjustment even at high-pressure levels.

2 Stainless steel diaphragm
Resists corrosion, leaking and freeze-up if used with liquid (cryogenic) gases for extended service life.
Note: Series 30/36 has neoprene composite diaphragm.

3 Color-coded labels
Supplies performance capabilities, easy gas service identification and technical information.

4 External relief valve
Protects regulator from damage due to inadvertent high-pressure surge. Relief valve will release excessive pressure and automatically reset.

5 Nickel-plated bonnet
Along with brass body protects regulator against corrosion.

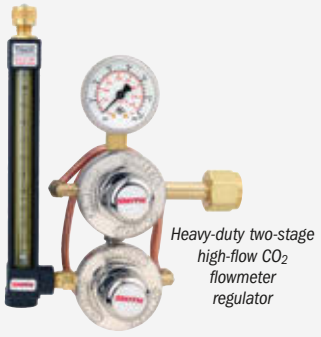
6 Gauges and lenses
2.5-inch corrosion-resistant polished brass gauges with shatter-resistant polycarbonate lenses.
Note: Series 30/36 has 2-inch painted steel gauges.

7 Sure Seat™ dual-filtered seat assembly
Protects high-pressure seat from debris for reliable operation and long service life.

Model	Stock Number	Gas	Max. Delivery Pressure	Max. Inlet Pressure	Outlet Connection	Inlet Connection
Heavy-Duty Series 40 Single-Stage Pressure Regulators	**40-175-540** Single-stage	Oxygen	175 psig (12 bar)	3000 psig (207 bar)	9/16"-18 RH	CGA 540
	40-275-540 Single-stage	Oxygen	275 psig (19 bar)	3000 psig (207 bar)	9/16"-18 RH	CGA 540
	40-15-510 Single-stage	Acetylene	15 psig (1 bar)	400 psig (28 bar)	9/16"-18 LH	CGA 510
	40-15-300 Single-stage	Acetylene	15 psig (1 bar)	400 psig (28 bar)	9/16"-18 LH	CGA 300
	40-50-510 Single-stage	LP gas	50 psig (3 bar)	400 psig (28 bar)	9/16"-18 LH	CGA 510
	40-275-580 Single-stage	Inert gas	275 psig (19 bar)	3000 psig (207 bar)	5/8"-18 RH internal	CGA 580
Medium-Duty Series 30 Single-Stage Pressure Regulators	**30-100-540** Single-stage	Oxygen	100 psig (7 bar)	3000 psig (207 bar)	9/16"-18 RH	CGA 540
	30-20-540 Single-stage	Oxygen	20 psig (1.4 bar)	3000 psig (207 bar)	9/16"-18 RH	CGA 540
	30-15-510 Single-stage	Acetylene	15 psig (1 bar)	400 psig (28 bar)	9/16"-18 LH	CGA 510
	30-15-300 Single-stage	Acetylene	15 psig (1 bar)	400 psig (28 bar)	9/16"-18 LH	CGA 300
	30-15-520 Single-stage	Acetylene	15 psig (1 bar)	400 psig (28 bar)	9/16"-18 LH	CGA 520
	30-15-200 Single-stage	Acetylene	15 psig (1 bar)	400 psig (28 bar)	9/16"-18 LH	CGA 200
	30-50-510 Single-stage	LP gas	50 psig (3 bar)	400 psig (28 bar)	9/16"-18 LH	CGA 510
	30-150-580 Single-stage	Argon/nitrogen	150 psig (10 bar)	3000 psig (207 bar)	5/8"-18 RH internal	CGA 580
	30-150-320 Single-stage	CO_2	150 psig (10 bar)	3000 psig (207 bar)	5/8"-18 RH internal	CGA 320
	30-100-350 Single-stage	Hydrogen/methane	100 psig (7 bar)	3000 psig (207 bar)	9/16"-18 LH	CGA 350
Heavy-Duty Series 46 Station Regulators	**46-175** Single-stage	Oxygen	175 psig (12 bar)	200 psig (14 bar)	9/16"-18 RH "B"	CGA 024*
	46-15 Single-stage	Acetylene	15 psig (1 bar)	200 psig (14 bar)	9/16"-18 LH "B"	CGA 025*
	46-50 Single-stage	LP gas	50 psig (3 bar)	200 psig (14 bar)	9/16"-18 LH "B"	CGA 025*
Medium-Duty Series 36 Station Regulators	**36-150** Single-stage	Oxygen	150 psig (10 bar)	200 psig (14 bar)	9/16"-18 RH "B"	CGA 024*
	36-15 Single-stage	Acetylene	15 psig (1 bar)	200 psig (14 bar)	9/16"-18 LH "B"	CGA 025*
	36-50 Single-stage	LP gas	50 psig (3 bar)	200 psig (14 bar)	9/16"-18 LH "B"	CGA 025*
Series 30 Two-Stage Regulators	**35-125-540** Two-stage	Oxygen	125 psig (9 bar)	3000 psig (207 bar)	9/16"-18 RH "B"	CGA 540
	35-15-510 Two-stage	Acetylene	15 psig (1 bar)	400 psig (28 bar)	9/16"-18 LH "B"	CGA 510
	35-50-580 Two-stage	Inert gas	50 psig (3 bar)	3000 psig (207 bar)	5/8"-18 RH internal	CGA 580

Regulators

Heavy-duty flowmeter regulator



Heavy-duty two-stage high-flow CO_2 flowmeter regulator

Heavy-duty flowmeter

Miller exclusive self-centering ball guide

Heavy-duty flowmeter regulators and flowmeters

Our Series 30™ heavy-duty flowmeter regulators and flowmeters feature an exclusive self-centering ball guide which provides accurate readings even if tipped. This ensures optimum weld quality and gas savings. Others use a non-self-centering flow tube ball that tends to float off center causing actual gas flow to be up to two times greater than indicated. Covered by a three-year warranty.

Economy flowmeter regulator

Dual flowmeter regulator

Economy flowmeter

Economy flowmeter regulators and flowmeters

Our economy flowmeter regulators and flowmeters combine exceptional value and a compact design with precise shielding gas regulation for MIG and TIG welding applications and more. Covered by a three-year warranty.

Single-stage flow gauge regulators

Series 30™ single-stage flow gauge regulators are compact and feature a forged brass body and a self-resetting pressure relief valve. They include a Sure Seat™ protective inlet filter and a durable neoprene-composite diaphragm. Covered by a three-year warranty.

Heavy-duty model features

1 Protective housing
Protects flow tubes from damage while offering unobstructed view of flow reading.

2 Extra-long flow tube
Expanded scales are easy to read and accurate within 5 percent of full reading. Can be attached to regulators or pipeline installations.

3 Shatter-resistant multi-scale flow tube
Made of shatter-resistant polycarbonate resin and features multiple scales. **Selec-O-Gas™ model** provides four separate, easy-to-read scales for CO_2, argon, argon/CO_2 mix, helium and a general scale for other non-corrosive gases. Rotate outer tube to desired scale.

4 Auto-reset pressure-relief valve
Protects regulator from damage due to high-pressure surge. Relief valve will release excessive pressure and automatically reset.

5 Sure Seat™ dual-filtered seat assembly
Protects high-pressure seat from debris for reliable operation and long service life.

Economy model features

6 Built-in rupture disc
Reduces possibility of flow tube damage due to high-pressure surge. Must be replaced if ruptured – not auto-resetting.

7 Shatter-resistant triple-scale flow tube
Made of shatter-resistant polycarbonate resin and can be rotated to position desired scale for easy reading. Scaled for CO_2, argon and argon/CO_2 mix, and helium.

8 Precision flow-adjustment valve
Allows easy adjustment to desired setting.

Model	Stock Number	Gas	Flow Range	Max. Inlet Pressure	Outlet Connection	Inlet Connection
Series 30 Heavy-Duty Flowmeter Regulators	**32-80-580** Single-stage	Argon/CO_2	10–80 scfh (5–38 lpm)	3000 psig (207 bar)	5/8"-18 RH internal	CGA 580
	32-80-320 Single-stage	CO_2	10–80 scfh (5–38 lpm)	3000 psig (207 bar)	5/8"-18 RH internal	CGA 320
	32-30-580 Single-stage **32-30-580-6** Single-stage w/gas hose	Argon/CO_2	10–60 scfh (5–28 lpm)	3000 psig (207 bar)	5/8"-18 RH internal	CGA 580
		Helium	20–190 scfh (10–90 lpm)	3000 psig (207 bar)		
	35-30-320 Two-stage high-flow CO_2	CO_2	10–80 scfh (5–38 lpm)	3000 psig (207 bar)	5/8"-18 RH internal	CGA 320
Heavy-Duty Flowmeters	**H1105** Argon, CO_2	Argon, CO_2	10–80 scfh (5–38 lpm)	80 psig (6 bar) recommended	5/8"-18 RH internal	1/4" NPT male
	H1240 Multi-scale (Selec-O-Gas™)	Argon, helium, CO_2	Depends on gas	30 psig (2 bar) recommended		
		General gas	Depends on gas	30 psig (2 bar) recommended		
H2051 Series Economy Flowmeter Regulators	**H2051B-580** Single-stage **H2051B-580H** Single-stage w/gas hose **33A-50-580** Single-stage dual flowmeter regulator	Argon	0–60 scfh (0–28 lpm)	3000 psig (207 bar)	5/8"-18 RH internal	CGA 580
		CO_2	0–50 scfh (0–24 lpm)	3000 psig (207 bar)		
		Helium	0–160 scfh (0–78 lpm)	3000 psig (207 bar)		
Economy Flowmeters	**H2230A** Multi-scale	Argon, helium, CO_2	Depends on gas	50 psig (3 bar) recommended	5/8"-18 RH internal	1/4" NPT male
	H2231A Multi-scale					5/8"-18 RH external
Series 30 Flow Gauge Regulators	**31-50-580** Single-stage **31-50-580-6** Single-stage w/gas hose	Argon	0–50 scfh (0–24 lpm)	3000 psig (207 bar)	5/8"-18 RH internal	CGA 580
	31-50-320 Single-stage	CO_2	0–50 scfh (0–24 lpm)	3000 psig (207 bar)	5/8"-18 RH internal	CGA 320

Regulators

HVAC/refrigeration purge/leak test regulator

Our single-stage nitrogen regulator is specially designed to meet the specifications of HVAC refrigerant purging applications. This regulator is used with nitrogen to test HVAC systems to locate leaks and to purge an area for installation and repair. It is economical, accurate and its compact size is useful where space is limited. Covered by a one-year warranty.

- 2-inch (51 mm) gauges with shatter-resistant lenses and solid brass body for durability
- Large durable nylon knob for easy pressure adjustment

Stock Number	Gas	Max. Delivery Pressure	Max. Inlet Pressure	Outlet Connection	Inlet Connection
30-450-580	Nitrogen	450 psig (31 bar)	3000 psig (207 bar)	7/16"-20 external flair fitting	CGA 580

Heavy-duty high-pressure regulator

820 Series regulators are for use on cylinders with a wide variety of non-corrosive inert gases. Typical applications include high-pressure testing, purging/charging, calibration kits, airline charging carts, chemical plants, manufacturing processes, research/development and laboratories. Covered by a two-year warranty.

- Piston-sensor design gives structural reliability in high-pressure use
- Low-torque-control adjusting screw for easy pressure adjustments in closed/dead end systems
- Due to specific configurations, we cannot accept returns of 820 Series regulators

Model Series	Max. Delivery Pressure	Max. Inlet Pressure
823	500 psig	6000 psig
824	1000 psig	
825	2000 psig	
826	4000 psig	
827	6000 psig	

Model Configuration 825 - 66 26

Option 1 Outlet pressure

823	0–500 psig
824	0–1000 psig
825	0–2000 psig
826	0–4000 psig
827	0–6000 psig

Option 2 Outlet connection

00	1/4" FNPT
66	Stainless steel needle valve with 1/4" NPT

Option 3 Inlet connection (additional inlet connections available)/Max. inlet pressure

00	1/4" FNPT	
08	CGA 540 (oxygen)	3000 psig
09	CGA 580 (inert)	3000 psig
26	CGA 347 stainless steel	5500 psig
27	CGA 677 stainless steel	7500 psig
28	CGA 680 stainless steel	5500 psig

Rear-entry liquid cylinder regulator

250 Series regulators are ideal for non-corrosive high-purity applications and have a rear-entry connection that provides clearance of the liquid cylinder ring for easier gauge reading. Covered by a two-year warranty.

- Easy-to-read single-scale 2.5-inch (64 mm) gauge with shatter-resistant lens
- Nickel-plated brass body for corrosion resistance
- Large 1-7/8-inch stainless steel diaphragm for precise control of pressure
- Large durable nylon knob for easy pressure adjustment
- Due to specific configurations, we cannot accept returns of 250 Series regulators

Note: Use Series 40™ heavy-duty regulators constructed with a stainless steel diaphragm for high-volume or liquid (cryogenic) cylinder applications.

Model Series	Max. Delivery Pressure	Max. Inlet Pressure
252	100 psig	3500 psig
254	200 psig	
255	350 psig	
256	500 psig	

Model Configuration 252 - 20 08

Option 1 Outlet pressure

252	0–100 psig
254	0–200 psig
255	0–350 psig
256	0–500 psig

Option 2 Outlet connection

00	1/4" FNPT
20	Chrome needle valve with 1/4" NPT
82	9/16"-18 RH "B"

Option 3 Inlet connection

00	1/4" FNPT
02	CGA 320
08	CGA 540
09	CGA 580

16391 (without pressure switch)

16347-3 (with pressure switch)

Three-stage nitrogen low-pressure regulator

These preset regulators are specially designed to deliver a highly accurate and consistent 0.50 psig supply of nitrogen to the head space of oil-filled power transformers. Available with or without electronic pressure switch. Covered by a one-year warranty.

- Built-in self-relieving valve set at 8 psig protects the system from over-pressurization due to temperature variation
- Rapid-fill bypass pressure valve allows rapid filling of the transformer with 6 psig of pressure

Note: Operation temperature: -40° to +180° Fahrenheit. Operation voltage (model 16347-3): 5 amps at 12/24 volts DC or 125 volts AC. 3 amps at 250 volts. Pressure switch setting: Adjustable from 70–300 psig (ships preset at 250 psig), 3/32-inch Allen head screw switch. Switch wiring: Normally open or normally closed (DPDT), three 18-inch flying leads.

Stock Number	Preset Outlet Pressure 1st Stage	2nd Stage	3rd Stage (delivery pressure)	Bypass Rapid Fill/Purge	Max. Inlet Pressure	Outlet Connection	Inlet Connection
16391 without pressure switch **16347-3** with pressure switch	150 psig (10 bar) into 2nd stage	8 psig (0.6 bar) into 3rd stage	0.4–0.6 psig (0.03–0.04 bar) into outlet	6 psig (0.4 bar)	3000 psig (207 bar)	1/2" FNPT	CGA 580

Most popular accessories

HB190 *H195*

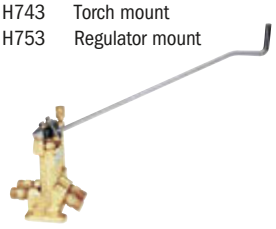
- **Hard Hat™ Regulator Guards**
  HB190 For Series 40
  H195 For Series 30

H697 *H698*

- **Reverse-Flow Check Valve Set (oxy and fuel)**
  H697 Torch mount
  H698 Regulator mount

H753

- **Flashback Arrestor Set (oxy and fuel)**
  H743 Torch mount
  H753 Regulator mount



- **GASAVER™**
  WDW100 Propylene/oxygen
  WDW101 Acetylene/oxygen
  WDW104 Propane or natural gas/oxygen (4 psi and above)
  - For repetitious brazing and soldering
  - Hang torch to shut off
  - Pilot light for relighting
  - Eliminates flame readjustment

- **Fixed-Flow Adaptors and Surge Protectors**
  H1400 Series fixed-flow adaptors are for welding operations requiring fixed-flow gases. 15001 Series surge protectors are for MIG welding applications to eliminate sudden surges of shielding gas in the wire feeder. Visit MillerWelds.com for more information.

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Heavy-Duty Outfits

HBA-40510

Combination torch outfits (acetylene or LP)

Oxy-fuel outfits include just about everything needed for your cutting, welding, brazing or heating project.

- Heavy-duty Series 40™ ***or*** medium-duty Series 30™ regulators with three-year warranty
- Heavy-duty torches with lifetime warranty
- Torch-mount flashback arrestors for added safety (acetylene outfits only)
- Exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- Both HBA-40510 and HBA-40300 outfits cut up to 1-1/4 inch (32 mm) with tip included, other outfits cut up to 5/8 inch (16 mm)
- All outfits cut up to 8 inches (203 mm) with optional tips

16206

16280

Combination torch and tip kits (acetylene or LP)

Combination kits are available with cutting, welding and heating tips ***or*** with multiple cutting tips.

- Heavy-duty torches with lifetime warranty
- Torch-mount flashback arrestors for added safety
- Exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- Cuts up to 5/8 inch (16 mm) with tip included
- Cuts up to 8 inches (203 mm) with optional tips

HBS-H510S

HBAS-30510

Cutting torch outfits (acetylene)

Hand cutting torch outfits are built for the toughest jobs.

- Corrosion-resistant regulators feature shatter-resistant polycarbonate gauge lenses
- 21-inch nickel-plated torch with lifetime warranty has reversible (top or bottom) mount cutting lever and an ease-on oxygen feature that reduces slag blowback when piercing
- Exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- HBS outfits include heavy-duty Series 40™ regulators with three-year warranty and Hard Hat™ gauge/regulator guards
- HBAS outfits include medium-duty Series 30™ regulators with three-year warranty, torch-mount flashback arrestors for added safety, plus hose, lighter, safety glasses and tip cleaner
- HBS outfits cut up to 1-1/4 inch (32 mm) with tip included, HBAS outfits cut up to 5/8 inch (16 mm)
- All outfits cut up to 12 inches (305 mm) with optional tips

**Acetylene regulator has CGA 300 inlet fitting.*

Heavy-duty torch tips

Stock Number	Max. Metal Thickness Inches (mm)	Cutting Jet Drill Size
Acetylene Cutting		
SC12-00	3/16 (5)	68
SC12-0	3/8 (10)	62
SC12-1	5/8 (16)	56
SC12-2	1-1/4 (32)	54
SC12-3	2 (51)	51
SC12-4	4 (102)	45
SC12-5	8 (203)	41
SC12-6	12 (305)	32
Propane/Natural Gas Cutting		
SC50-00	3/16 (5)	68
SC50-0	3/8 (10)	62
SC50-1	5/8 (16)	56
SC50-2	1-1/4 (32)	54
SC50-3	2 (51)	51
SC50-4	4 (102)	45
SC50-5	8 (203)	41
SC50-6	12 (305)	32
SC50-7	14 (354)	28
SC50-8	18 (457)	17
SC50-9	20 (508)	3
Propylene Cutting		
SC60-0	1/4 (6)	62
SC60-1	5/8 (16)	56
SC60-2	1-1/4 (32)	54
SC60-3	2 (51)	51
SC60-4	4 (102)	45
SC60-5	8 (203)	41
SC60-6	12 (305)	32
Acetylene Gouging		
SC13-3	3/8 (10) wide, 1/4 (6) deep	
Propane/Natural Gas Gouging		
SC23-3	3/8 (10) wide, 1/4 (6) deep	
Propylene Gouging		
SC23-3M	3/8 (10) wide, 1/4 (6) deep	
Acetylene Heating		
ST602	40,000 Btu	
ST603	72,000 Btu	
ST605	125,000 Btu	
ST610	195,000 Btu	

See Gas Equipment catalog (#264 059), or visit MillerWelds.com or your distributor for additional tips, options and accessories.

Outfit	Stock Number	Fuel	Cut Tip	Weld Tip	Heat Tip	Description	Typical Applications
Combination Torch Complete Outfits	**HBA-40510 HBA-40300***	Acetylene	SC12-1 SC12-2	SW205	ST602	Heavy-duty combination torch, heavy-duty regulators, 25 ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors	Heavy fabrication, construction, pipeline, maintenance/repair, rail and truck repair
	HBA-30510 HBA-30300*	Acetylene	SC12-1	SW205	ST602	Heavy-duty combination torch, medium-duty regulators, 25 ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors	
	HBA-30510LP	Propane	SC40-1	–	ST615	Heavy-duty combination torch, medium-duty regulators, 20 ft. (7.6 m) "T"-grade hose, lighter, safety glasses, tip cleaner and check valves	
	HBA-30510MP	Propylene	SC60-1	–	ST815		
Combination Torch and Tip Kits	**16206**	Acetylene	SC12-1	SW203	ST602	Heavy-duty combination torch and flashback arrestors	Heavy fabrication, construction, pipeline, maintenance/repair, rail and truck repair
	16280	Acetylene	SC12-0, SC12-1	–	–		
	16280LP	Propane	SC40-0, SC40-1	–	–		
Cutting Torch Outfits	**HBS-H510S HBS-H300S***	Acetylene	SC12-2	–	–	Heavy-duty SC229 hand cutting torch and heavy-duty regulators with Hard Hat™ gauge guards	Heavy fabrication, construction, shipyard, rail car, rail and truck repair
	HBAS-30510 HBAS-30300*	Acetylene	SC12-1	–	–	Heavy-duty SC229 hand cutting torch, medium-duty regulators, 20 ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors	

Medium-Duty Outfits

MBA-30510

Combination torch outfits (acetylene or LP)

Oxy-fuel outfits include just about everything needed for your cutting, welding, brazing or heating project.

- Medium-duty Series 30™ regulators with three-year warranty
- Medium-duty torches with lifetime warranty
- Torch-mount flashback arrestors for added safety (acetylene outfits only)
- Exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing provides for resistance to flashbacks
- Cuts up to 5/8 inch (16 mm) with tip included
- Cuts up to 6 inches (153 mm) with optional tips

16205

16281

Combination torch and tip kits (acetylene or LP)

Combination kits are available with cutting, welding and heating tips ***or*** with multiple cutting tips.

- Medium-duty torches with lifetime warranty
- Torch-mount flashback arrestors for added safety
- Exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- Cuts up to 5/8 inch (16 mm) with tip included
- Cuts up to 6 inches (153 mm) with optional tips

MB55A-510

Toughcut™ combination torch outfits (acetylene or LP)

Economy outfits include many features found on more expensive outfits.

- Medium-duty Series 30™ regulators and medium-duty torches with three-year warranty
- Check valves for added safety and torch life
- Exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- Cuts up to 5/8 inch (16 mm) with tip included
- Cuts up to 6 inches (153 mm) with optional tips

Tag-A-Long TL-550

Versa-Torch VT-4T

Tag-A-Long™ and Versa-Torch™ portable outfits (acetylene)

Complete, portable outfits housed in carriers designed for mobility and ease of storage, plus long-lasting Graf-Tite® soft-seat cutting tips and check valves for added safety and torch life.

- Tag-A-Long includes medium-duty Series 30™ regulators and medium-duty torch with three-year warranties
- Versa-Torch includes Series 30™ regulators with three-year warranty and standard-duty torch with lifetime warranty

**Acetylene regulator has CGA 300 inlet fitting.*

Medium-duty torch tips

Stock Number	Max. Metal Thickness Inches (mm)	Cutting Jet Drill Size
Acetylene Cutting		
MC12-00	3/16 (5)	68
MC12-0	3/8 (10)	62
MC12-1	5/8 (16)	55
MC12-2	1 (25)	54
MC12-3	2 (51)	51
MC12-4	4 (102)	45
MC12-5	6 (152)	41
Propane/Natural Gas Cutting		
MC40-00	3/16 (5)	68
MC40-0	3/8 (10)	62
MC40-1	5/8 (16)	55
MC40-2	1-1/4 (32)	54
MC40-3	2 (51)	51
MC40-4	4 (102)	51
Propylene Cutting		
MC60-1	5/8 (16)	55
MC60-2	1-1/4 (32)	54
MC60-3	2 (51)	51
MC60-4	4 (102)	45
Acetylene Gouging		
MC13-3	3/8 (10) wide, 1/4 (6) deep	

Note: Tips above fit medium- and standard-duty torches.

Acetylene Heating	
MT603	40,000 Btu
MT605	73,000 Btu
MT610	129,000 Btu

See Gas Equipment catalog (#264 059), or visit MillerWelds.com or your distributor for additional tips, options and accessories.

Outfit	Stock Number	Fuel	Cut Tip	Weld Tip	Heat Tip	Description	Typical Applications
Combination Torch Complete Outfits	**MBA-30510** **MBA-30300***	Acetylene	MC12-0 MC12-1	MW205	MT603	Medium-duty combination torch, medium-duty regulators, 25 ft. (7.6 m) hose, lighter, safety glasses, tip cleaner and flashback arrestors	Fabrication, farm and ranch, pipe, truck and auto, refrigeration, maintenance/repair
	MBA-30510LP	Propane	MC40-1	–	MT805	Medium-duty combination torch, medium-duty regulators, 20 ft. (7.6 m) "T"-grade hose, lighter, safety glasses, tip cleaner and check valves	
	MBA-30510MP	Propylene	MC60-1				
Combination Torch and Tip Kits	**16205**	Acetylene	MC12-1	MW203	MT603	Medium-duty combination torch and flashback arrestors	Fabrication, farm and ranch, pipe, truck and auto, refrigeration, maintenance/repair
	16281	Acetylene	MC12-0, MC12-1	–	–		
	16281LP	Propane	MC40-0, MC40-1	–	–		
Toughcut Economy Combination Torch Outfits	**MB55A-510** **MB55A-300***	Acetylene	MC12-1	MW205	MT603	Medium-duty combination torch, medium-duty regulators, 20 ft. (7.6 m) hose, lighter, safety glasses and check valves	Fabrication, farm and ranch, pipe, hobby, auto, refrigeration, maintenance/repair
	MB54A-510 **MB54A-300***	Acetylene	MC12-1	MW205	–		
	MB54-510L **MB54-300L***	Acetylene	MC12-1	MW205	–	Medium-duty combination torch, medium-duty regulators, safety glasses and check valves	
	MB54A-510LP	Propane	MC40-1	–	–	Medium-duty combination torch, medium-duty regulators, 20 ft. (7.6 m) "T"-grade hose, lighter, safety glasses and check valves	
	MB54A-510MP	Propylene	MC60-1				
Combination Torch Portable Outfits	**TL-500** (no tanks) **TL-550**	Acetylene	MC12-0	MW203	–	Medium-duty (TL500/TL550) or standard-duty (VT-4T) combination torch, medium-duty regulators, 12.5 ft. (3.8 m) hose, carrier, lighter, safety glasses, check valves and cylinders (cylinders NOT included with TL-500)	Farm and ranch, hobby, DIY, auto, refrigeration, maintenance/repair
	VT-4T	Acetylene	MC12-00	LT103, 104, 106	13716		

Torches

Gas Axe
SC929

Heavy-duty torches

SC229

SC229S

Cutting torches (acetylene, natural gas or propane/propylene-based fuels)

Gas Axe™ extra-heavy-duty cutting torches are ideal for scrap and salvage.

- Covered by one-year warranty
- Reversible (top or bottom) mount cutting lever
- Available in four lengths and three different head angles
- Uses our exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- Cuts up to 24 inches (610 mm)

Heavy-duty cutting torches feature solid construction and ease of operation for industries such as construction, fabrication, shipyards and salvage.

- Covered by lifetime warranty
- Nickel-plated finish for added corrosion resistance and to reflect residual heat
- Reversible (top or bottom) mount cutting lever
- Available in three lengths and three different head angles
- Uses our exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- Cuts up to 12 inches (305 mm)

SC209

WH200A

MC509

WH100

AC309

AW1A

Combination torches (acetylene, natural gas or propane/propylene-based fuels)

Constructed to last a lifetime for safe performance under rugged conditions.

- Covered by lifetime warranty
- Ease-on cutting oxygen valve to reduce slag blowback when piercing
- Thick-wall brass head forgings resist warping and distortion
- Heavy- and medium-duty models are available with 75 or 90 degree head angles
- Uses our exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- Heavy-duty torches cut up to 8 inches (203 mm), medium-duty up to 6 inches (152 mm) and standard-duty up to 3 inches (76 mm)

SC781A

SC772A

SC770

Machine torches (acetylene, LP or natural gas)

Superior performance with solid construction.

- Covered by lifetime warranty
- Torch barrels are adjustable to four positions at 90-degree increments and barrel diameters are 1-3/8 inches (9.5 mm) to fit most machines
- Rack pitch is 32-8 teeth per inch
- Uses our exclusive long-lasting Graf-Tite® soft-seat cutting tips with in-tip gas mixing for added resistance to flashbacks
- SC781A high-capacity three-hose torch cuts up to 24 inches (610 mm) with acetylene and 20 inches (508 mm) with LP or natural gas
- SC770 and SC772A two-hose torches cut up to 12 inches (305 mm) with acetylene, LP or natural gas

Torches

Stock Number	Head Angle in Degrees	Length Inches (mm)
Gas Axe Extra Heavy-Duty Cutting Torches		
SC925	75	21 (533)
SC929	90	21 (533)
SC935	75	36 (914)
SC939	90	36 (914)
SC930	180	36 (914)
SC945	75	48 (1219)
SC949	90	48 (1219)
SC940	180	48 (1219)
SC965	75	72 (1829)
SC969	90	72 (1829)
SC960	180	72 (1829)
Heavy-Duty Cutting Torches		
SC175	75	17 (432)
SC179	90	17 (432)
SC225	75	21 (533)
SC225S	75	21 (533)
SC229	90	21 (533)
SC229S	90	21 (533)
SC220	180	21 (533)
SC365	75	36 (914)
SC369	90	36 (914)
SC360	180	36 (914)
Heavy-Duty Combination Torches		
SC205	75	12.5 (318)
SC209	90	12.5 (318)
WH200A	Handle	7.5 (191)
Medium-Duty Combination Torches		
MC505	75	11.25 (286)
MC509	90	11.25 (286)
WH100	Handle	7 (178)
Standard-Duty Combination Torches		
AC309	90	8.5 (216)
AW1A	Handle	5.75 (146)
Machine Torches		
SC781A	–	15.5 (394)
SC772A	–	13.75 (349)
SC770	–	8 (203)

Most popular accessories

- **Circle Cutter Guide** 16229

H753

- **Flashback Arrestor Set (oxy and fuel)**
  H743 Torch mount
  H753 Regulator mount

- **Safety Glasses**
  (see pg 96 for more styles)
  #235 661 Blue frame/shade 3
  #235 657 Blue frame/shade 5
- Safety Gloves (pg 98)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

Proportional Gas Mixers

Our line of proportional gas mixers can help your operation save money, work more efficiently and produce better-quality welds by providing proper shielding gas mixtures for frequently used welding processes.

Argon/CO_2 gas mixer 299-006-1C shown.

Accurate, on-site shield gas mixing. Various welding processes require different gas mixes for the best results. Our proportional gas mixers are accurate and allow custom mixtures for optimal welds.

No stocking or handling of premixed gases saves time, money and reduces the number of cylinders that need to be stored.

Reduces setup time. No need to change cylinders, regulators, flow control devices or hoses when switching from one range of mixed gas to another.

Ideal for education and training. Operators can quickly see the effect of various gas mixtures on weld appearance, quality and penetration.

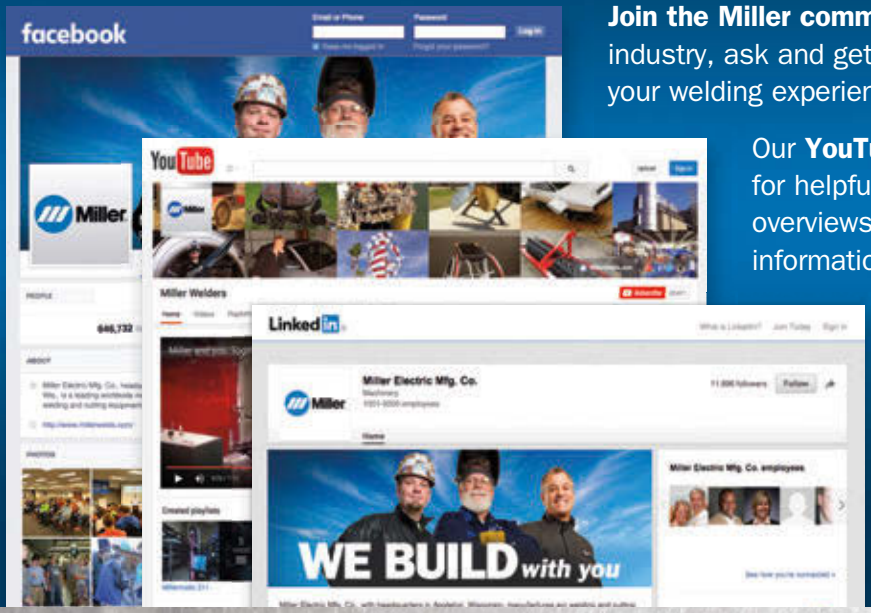
Easy operation. Simply set the dials for the desired mix and flow. Mixers are mechanical, no electricity is required.

Serves from one to five welding stations with a single mixer. Delivers accurate mixtures at flows ranging from 10 to 180 scfh.

Covered by a one-year warranty.

Stock Number	Gases	Adjustment % Range	Flow Range	Outlet Pressure	Required Inlet Pressure	Outlet Connection	Inlet Connection	Conversion Tables
299-006-1C	Argon	0–100%	10–180 scfh	50 psig (3.5 bar)	105–115 psig (7.3–7.9 bar)	5/8"-18 RH internal	5/8"-18 RH internal	Argon/helium Argon/oxygen CO_2/oxygen
	CO_2	100–0%					5/8"-18 RH internal	
299-006-3C	Argon	0–100%	10–180 scfh	50 psig (3.5 bar)	105–115 psig (7.3–7.9 bar)	5/8"-18 RH internal	5/8"-18 RH internal	Argon/CO_2 Argon/oxygen CO_2/oxygen
	Helium	100–0%					5/8"-18 RH internal	
299-011-1C	Argon	50–100%	10–180 scfh	50 psig (3.5 bar)	105–115 psig (7.3–7.9 bar)	5/8"-18 RH internal	5/8"-18 RH internal	Argon/helium Nitrogen/hydrogen Argon/oxygen Argon/CO_2
	Hydrogen	50–0%					9/16"-18 LH external	
299-014-1C	Argon	80–100%	10–180 scfh	50 psig (3.5 bar)	105–115 psig (7.3–7.9 bar)	5/8"-18 RH internal	5/8"-18 RH internal	Argon/CO_2 Argon/hydrogen Argon/helium Nitrogen/hydrogen
	Oxygen	20–0%					5/8"-18 RH internal	

Stay Connected with Miller®



Join the Miller community to keep up to date with the welding industry, ask and get answers to your questions and share your welding experiences.

Our **YouTube channel** is the welder's destination for helpful tips and welding instruction, product overviews and demonstrations, welding process information and engaging stories and applications.

The Miller **LinkedIn** page is the best source for company news, industry news and solutions that help customers make informed business decisions that better their bottom line.

We hope you'll join us!

Training Solutions

For more detailed information, visit
MillerWelds.com/livearc

MORE on the WEB

LiveArc™

Welding Performance Management System

The LiveArc system is built to deliver a real-world, arc-on welding experience. Advanced motion-tracking technology provides feedback on technique parameters during initial simulation (practice) mode as well as live arc training mode.

- **Builds higher skill levels**
- **Produces faster results**
- **Provides a cost-effective solution**

The reality-based recruiting, screening, training, and re-qualification solution for industrial, manufacturing and educational markets.

The LiveArc welding performance management system is a new and innovative reality-based training system that utilizes a live welding arc, unlike other virtual training solutions. It's designed to recruit, screen, train, re-qualify and manage the performance of weld operators – better, faster and more cost-effectively than traditional methods.

Advanced motion-tracking technology provides the critical feedback required for improvement of baseline welding skills. Guided by an easy-to-understand interface with graphical icons and instructional pop-ups, users will find navigation intuitive with a quick learning curve. Scoring and performance feedback engage and foster independent self-improvement through repetition. Users can guide themselves through assignment selection and simulated welding runs to acquire desired techniques before moving to actual live arc training experiences.

The system also gives welding instructors the ability to configure assignments and technique parameters. It stores the detailed performance history of each operator. LiveArc is a powerful teaching tool that allows instructors to better manage their time, reduces the cost of teaching materials and accelerates student progress.

Check out **MillerWelds.com/livearc** for videos, product information and more!

LiveArc™ System

LiveArc system shown with optional welding positioning arm.

Powerful industrial computer at the heart of the system features solid-state technology and filterless, fanless cooling. The system is compatible with Miller® wire feed power sources and is capable of MIG and flux-cored applications.

Touch screen monitor works with a gloved hand and features a 21.5-inch widescreen HD display.

***NEW!* Multi-pass groove and fillet** assignments designed by Miller and the capability to develop customized assignments based on user applications.

***NEW!* LiveArc PC software** is available for free installation on a separate PC. Data can be transferred to and from PC for reviewing student progress and managing assignments/users.

***NEW!* English and Spanish translations** are available on all LiveArc systems.

Motion-tracking cameras provide feedback on gun parameters.

SmartGun is an industry-exclusive 400-amp MIG gun featuring built-in LEDs that are tracked by the system's cameras. The ergonomic soft-grip handle provides tactile vibration feedback that helps guide real-time performance adjustments, reinforcing optimal position and movement.

OLED display on gun provides initial visual feedback to guide proper gun positioning. Pushbuttons provide a convenient alternative to the touch screen for navigation.

Rugged ArcStation™ base features a 1/2-inch reversible steel table top and ships complete with drawers, gun holder, quick-release clamps and heavy-duty casters for mobility.

Calibration tool is easy to use and enables flexible coupon placement by making the system aware of the exact joint location.

Optional welding positioning arm is available for training in out-of-position welding applications.

LiveArc system comes complete with

- SmartGun with 15 ft. (4.6 m) cable (#270 698)
- Calibration tool (#266 768)
- Two table clamps (#257 285)
- Extra Tregaskiss consumables

LiveArc system with welding positioning arm includes above plus

- Arm assembly (#270 727)
- C-clamp assembly (#270 725)
- Removable arm extension for right- and left-hand applications (#270 728)
- Software update for welding positioning arm

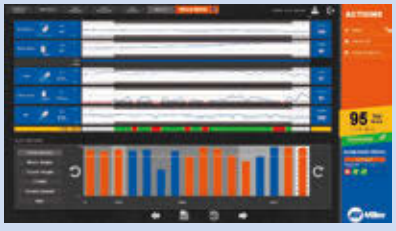
Intuitive user interface

Assignment selection screen

- Guides the user through a range of targeted exercises
- Includes a library of Miller-designed assignments and the flexibility to configure customized assignments
- Offers assignment completion status, history summary and easy access to detailed performance history data

Welding procedure specification (WPS) screen

- Guides the user through proper selection and preparation of materials
- Provides correct power source and wire feeder settings
- Provides target values and limits for various parameters
- Assignment parameters can be configured to suit the skill level (and scoring potential) of the user
- Displays instructor-determined target score and assignment completion criteria



Post-weld feedback screen

- Data is provided following tests in both simulation and live arc modes
- Performance feedback on various parameters is provided
- All test data is stored and allows for monitoring and evaluation

Stock Number	Process	Position	Multi-Pass	Input Power	Rated Output	Computer	Monitor	Dimensions	Net Weight
(#301 233) LiveArc system only **(#301 233 001)** LiveArc system with welding positioning arm **(#301 234)** Welding positioning arm only (includes software for arm)	GMAW/GMAW-S/ GMAW-P/FCAW-G	2F/3F/4F/1G/ 2G/3G/4G	Groove and fillet up to 1 in. (25 mm) plate	120 V, 60 Hz Compatible with Miller wire feed power sources	400 A at 60% duty cycle (mixed gases)	Intel core i7, 128 GB SSD, fanless cooling, HDMI port supports secondary monitor (not included)	21.5 HD LCD touch screen display	H: 77.5 in. (1,969 mm) W: 41.5 in. (1,054 mm) W: 46 in. (1,168 mm) with welding positioning arm D: 31 in. (787 mm)	**System only** 366 lb. (166 kg) **System with arm** 480 lb. (218 kg) **Arm only** 72 lb. (33 kg)

Welding Safety & Health

All of our products are designed and built to protect the welder behind the hood and their environment – because that's what we know. By listening to welders and working with them side-by-side, we understand their pain points and have developed products that offer protection from the unique physical dangers and health risks prevalent within welding applications. Miller's complete line of Head and Face, Hand and Body, Heat Stress, and Weld Fume protection is designed to protect and perform in demanding welding, cutting and grinding applications.

For more detailed information, visit **MillerWelds.com/safety**

Welding Helmets

See page 96 for helmet accessories and packages.

Serious dependability backed with a three-year warranty (unless noted).

	Digital Titanium 9400i™	Digital Titanium 9400™	Digital Titanium 7300™	Titanium 1600i™	Titanium 1600™	Digital Infinity™	Digital Elite™	Digital Performance™	Classic Series VSi™	Classic Series VS	Classic Series FS#10 Flip-Up	Classic Series FS#10
Viewing Area	9.2 sq. in.	9.2 sq. in.	7.2 sq. in.	16 sq. in.	16 sq. in.	13.4 sq. in.	9.2 sq. in.	7.2 sq. in.	5.9 sq. in.	5.2 sq. in.	5.1 sq. in.	5.2 sq. in.
Auto-Darkening	Yes	Yes	Yes	–	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shades	Cut: 5–8 Weld: 8–13	Cut: 5–8 Weld: 8–13	Cut: 5–8 Weld: 8–13	10	10	Cut: 5–8 Weld: 8–13	Cut: 5–8 Weld: 8–13	Cut: 5–8 Weld: 8–13	8–13	8–12	10	10
Modes	Weld/Cut/ X-Mode/ Flip grind	Weld/Cut/ X-Mode/ External grind	Weld/Cut/ X-Mode/ External grind	Passive weld	Passive weld	Weld/Cut/ Grind/X-Mode	Weld/Cut/ Grind/X-Mode	Weld/Cut/ Grind	Weld/X-Mode/ Flip grind	Weld	Weld/ Flip grind	Weld
Integrated Grind Shield	Yes	–	–	Yes	–	–	–	–	Yes	–	Yes	–
Auto-on	Yes	Yes	Yes	–	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sensors	4	4	3	–	–	4	4	3	3	2	2	2
TIG Rating	5 amps/below	5 amps/below	5 amps/below	–	–	5 amps/below	5 amps/below	5 amps	5 amps/below	20 amps	20 amps	20 amps
Switching Speed	1/20,000	1/20,000	1/20,000	–	–	1/20,000	1/20,000	1/20,000	1/20,000	1/10,000	1/3,600	1/3,600
Digital Controls	Yes	Yes	Yes	–	–	Yes	Yes	Yes	–	–	–	–
Prem. Headgear	Yes	Yes	Yes	–	–	Yes	Yes	Yes	–	–	–	–
InfoTrack™	Yes	Yes	Yes	–	–	Yes	–	–	–	–	–	–
Weight	24 oz. (680 g)	20 oz. (567 g)	19 oz. (539 g)	22.5 oz. (638 g)	17 oz. (482 g)	23 oz. (652 g)	18 oz. (510 g)	17 oz. (482 g)	23 oz. (652 g)	16 oz. (454 g)	14 oz. (396 g)	16 oz. (454 g)
Warranty	3 years	3 years	3 years	30 days	30 days	3 years	3 years	3 years	2 years	2 years	2 years	2 years

See chart above for feature availability.

X-Mode.™ Electromagnetically senses the weld to eliminate sunlight interference and continuously detects the arc even if sensors are blocked.

InfoTrack™ arc tracking technology features arc time, time and timer functions, and a multi-language help menu.

Industry's largest viewing area. Digital Infinity™ Series helmets feature a 13.4 square inch viewing area allowing for a wide range of view.

Premium headgear. Features ample adjustability settings and enhanced support for the perfect fit, maximizing comfort.

Titanium Series™

Designed to perform in the most intense industrial applications. See literature no. AY/41.0

Titanium 9400i™
#256 177
(features integrated grinding shield)

Titanium 9400™
#256 176

Titanium 7300™
#256 175

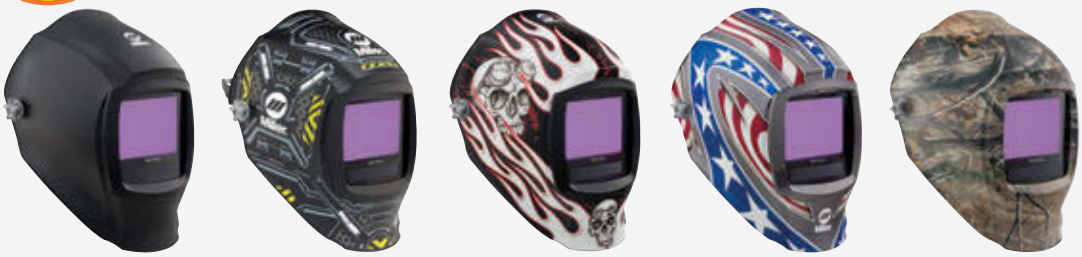
Titanium 1600i™
#255 519
(features integrated grinding shield)

Titanium 1600™
#245 799

- Four operating modes: weld, cut, grind and X-Mode™ (not available on 1600/1600i models)
- Silver shell reflects heat to keep helmet and user cool
- Aluminum heat shield protects auto-darkening lens in high-amperage applications

NEW! Digital Infinity™ Series

Largest-view helmets for demanding applications. See literature no. AY/42.0



Black
#271 329

Black Ops™
#271 333

Departed™
#271 332

Stars and Stripes™
#271 330

Camouflage
#271 331

- Largest viewing area in the industry at 13.4 square inches
- Four arc sensors and four modes: weld, cut, grind and X-Mode™

Digital Elite™ Series

Versatile helmets for demanding applications. See literature no. AY/43.0

Black
#257 213

Lucky's Speed Shop™
#257 214

Inferno™
#257 217

Vintage Roadster™
#259 485

Camouflage
#256 173

NEW! **Pink Camo**
#273 953

Cat® Edition 1
#268 618

Blue Flame
#269 273

Stars and Stripes™ III
#264 852

Hot Rod Garage™
#269 946

Not Forgotten™
#260 127

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- 9.2 square inch viewing area
- Four arc sensors and four modes: weld, cut, grind and X-Mode™

Includes $10 Donation to The National League of POW/MIA Families

Miller will be donating $10 to the National League of POW/MIA Families (pow-miafamilies.org) for each Not Forgotten helmet sold.

Digital Performance™ Series

Mid-range helmets for most welding applications. See literature no. AY/44.0

Black
#256 159

Cat® Edition 1
#268 739

America's Eagle™ II
#264 851

Blue Rage™
#256 164

'64 Custom™
#256 160

Camouflage
#256 163

- 7.2 square inch viewing area
- Three arc sensors and three modes: weld, cut and grind

Classic Series

Helmets for the value-minded welder. See literature no. AY/45.0

Black (VS)
#251 292

Stars and Stripes™
#271 345

Metalworks™
#271 346

Red Flame
#271 347

Camouflage
#271 348

NEW! **VS graphic models**

VSi™
#260 938

FS#10 Flip-Up
#263 038

FS#10
#231 703
(4 pack)

- FS#10 Flip-Up and VSi models feature integrated grinding shield
- VSi model features X-Mode

MP-10™ Series

Passive, non-auto-darkening helmets.

Black
#238 497 *(each)*
#235 626 *(6 pack)*

Inferno™
#238 496

- Passive shade 10 lens
- Upgradable to auto-darkening lens with kit #236 052

Helmet Accessories and Packages

Gen II Headgear #256 174
- Extensive adjustability settings and a pivoting top for better fit and comfort

Gen III Headgear #271 325
- Oversized comfort cushion provides extensive adjustability, settings, and enhanced support

Slotted Hard Hat Adapter
#259 637
- Compatible with most slotted hard hats. Helmet and hat not included

Hard Hat Adapter
#213 110 XL and XLi
#222 003 All other Miller Series
- Compatible with Fibre Metal and MSA hats. Other brands may fit depending on size and shape. Helmet and hat not included

2x4 Auto-Darkening Lens
#770 660 Shade 8
#770 659 Shade 9
#770 226 Shade 10
#770 961 Shade 11
- Fits all 2x4-inch windows
- Solar powered, two arc sensors
- Light state shade 3
- Two-year warranty

Helmet Hook #251 018
- Holds welding helmets, grinding shields or other helmets with a headgear
- Silicone strap secures the helmet in place

Helmet Bib #253 882
- Attaches to bottom of the helmet with hook-and-loop fasteners for added neck coverage

Jobsite Tool Bag #228 028
- Over twenty separate pockets
- Opening of 12 x 18.5 inches (305 x 470 mm)

Performance Pak shown.

Protection Paks
- **Starter Pak**
  Includes #251 292 Classic VS helmet and Classic Cloth jacket
  #255 848 Large
  #255 850 X-Large
  #255 851 2X-Large
- **Performance Pak**
  Includes #256 159 Performance helmet and Indura® Cloth jacket
  #240 886 Large
  #240 887 X-Large
  #240 888 2X-Large

Goggles

Weld-Mask™ Auto-Darkening Goggles
#267 370
See literature no. AY/40.0

2 YEAR WARRANTY

- Compact design allows users to weld in spaces where access with traditional welding helmets is limited
- Ideal for maintenance, repair, and installation or as an alternative for plasma cutting glasses
- Lightweight design virtually eliminates neck strain and eye covering fits tightly to face to block out light for precision welding in bright areas
- Face shield and head cover provide coverage for UV/IR rays and applications with limited spatter
- Goggles feature shades 5, 7, 9, 11 and 13 (light state shade 3)

NEW! Safety Glasses

- Anti-fog coating and high-quality optics
- Form-fitting orbital eye coverage
- Shatterproof polycarbonate lenses
- Wrap-around designs meet ANSI side shield requirements
- I/O (indoor/outdoor) lenses feature light shading with a mirrored finish
- Smoke lenses provide shade protection in outdoor applications
- Shade 3 and 5 green IR lenses are for cutting, brazing or soldering
- ANSI Z87.1+ compliant

Safety and Cutting Glasses Chart
See literature no. AY/41.0

Frame Style/Color	Clear	I/O	Smoke	Shade 3	Shade 5
Classic	#272 187	–	–	–	–
Classic with Strap	#272 188	–	–	–	–
Spark™	#272 190	–	–	–	–
Spatter™ - Black	#272 191	–	#272 195	–	–
Spatter™ - White	#272 198	–	#272 199	–	–
Slag™ - Black	#272 201	#272 202	#272 203	#272 204	#272 205
Slag™ - White	#272 206	#272 207	#272 208	#272 196	#272 209
Gen I - Black	#238 979	–	#235 656	#235 662	#235 658

Head Threads

- Bandannas have a sewn-in sweatband
- Caps are reversible with a low, soft bill

Head Thread Size Chart

Caps	Size 7	Size 7-1/8	Size 7-1/4	Size 7-3/8	Size 7-1/2	Size 7-3/4
American Pride	#230 553	#230 554	#230 555	#230 556	#230 557	#230 558
Blue Flame	#230 535	#230 536	#230 537	#230 538	#230 539	#230 540
Dragon	#230 547	#230 548	#230 549	#230 550	#230 551	#230 552
Ghost Skulls	#230 541	#230 542	#230 543	#230 544	#230 545	#230 546
Bandannas (One size only)	Black #250 904	Dragon #230 560	Maple Leaf #250 905	Skull & Barbed Wire #230 559		

Welding Apparel

Leather Jacket
(See size chart)
- Top grain leather
- Expandable leather strategically placed for optimal mobility
- Flame-resistant inside cuff
- Satin lined
- Tapered, athletic cut

WeldX™ Jacket
(See size chart)
- Lightweight exclusive material with extreme flame-resistant properties
- 7-ounce WeldX front and flame-resistant navy cotton back
- Vented back/extended rear tail
- Zipper closure with hook-and-loop fastened flap
- Chromium free

Combo Jacket
(See size chart)
- Indura® flame-resistant cotton (flame resistance guaranteed for life of jacket)
- Top grain leather
- Allows for patented bib/apron attachment

Indura® Cloth Jacket
Men's and Women's
(See size chart)
- Indura® flame-resistant cotton (flame resistance guaranteed for life of jacket)
- Nomex® flame-resistant thread

Classic Cloth Jacket
(See size chart)
- 9-ounce flame-resistant navy cotton
- Pre-shrunk fabric
- Fold-in sleeve snaps
- Finished hems and reinforced stitching

WeldX™ Cape Sleeves
(See size chart)
- 7-ounce WeldX front and flame-resistant navy cotton back
- Fold-in sleeve snaps
- Allows for bib attachment (sold separately)

Classic Cloth Cape Sleeves
(See size chart)
- 9-ounce flame-resistant navy cotton
- Fold-in sleeve snaps
- Allows for bib attachment (sold separately)

Classic Cloth Lab Coat
(See size chart)
- 40-inch length
- 9-ounce flame-resistant navy cotton
- Fold-in sleeve snaps
- Finished hems and reinforced stitching

WeldX™ Apron
#247 134
- 35-inch length with accessible front pocket
- Adjustable drawstring ensures a good fit

Classic Cloth Apron
#247 149
- 35-inch length with accessible front pocket
- Adjustable drawstring ensures a good fit

Bib/Apron
#231 125
- Attaches to Indura® combo jacket with snaps across the chest as a bib or along the bottom as an apron

WeldX™ Bib
#247 133
- 19-inch length
- Attaches to cape sleeves

Classic Cloth Bib
#247 147
- 19-inch length
- Attaches to cape sleeves

WeldX™ Sleeves
#247 137
- 18-inch length
- Fold-in sleeve snaps
- One-handed cinch closure

Classic Cloth Sleeves
#247 148
- 18-inch length
- Fold-in sleeve snaps
- One-handed cinch closure

Combo Sleeves
#231 096
- Indura® flame-resistant cotton/top grain leather
- 21-inch (533 mm) length

Welding Apparel Size Chart

Apparel	Small	Medium	Large	X-Large	2X-Large	3X-Large	4X-Large	5X-Large
Leather Jacket	#231 088	#231 089	#231 090	#231 091	#231 092	#231 093	#231 094	#231 095
WeldX Jacket	#247 114	#247 115	#247 116	#247 117	#247 118	#247 119	#247 120	#247 121
Combo Jacket	#231 080	#231 081	#231 082	#231 083	#231 084	#231 085	#231 086	#231 087
Indura Cloth Jacket (Men's)	#258 095	#258 097	#258 098	#258 099	#258 100	#258 101	#258 102	#258 104
Indura Cloth Jacket (Women's)	#264 379	#264 380	#264 381	#264 382	#264 383	–	–	–
Classic Cloth Jacket	#244 749	#244 750	#244 751	#244 752	#244 754	#244 755	#244 756	#244 758
WeldX Cape Sleeves	#247 122	#247 123	#247 124	#247 126	#247 127	#247 128	#247 130	#247 131
Classic Cloth Cape Sleeves	#247 138	#247 139	#247 140	#247 142	#247 143	#247 144	#247 145	#247 146
Classic Cloth Lab Coat	–	–	#252 000	#252 001	#252 002	–	–	–

Welding Gloves

Performance – unprecedented comfort and performance, redefining the welding glove industry. Three-dimensional pattern, select-grade leather and precision craftsmanship with unique design features for specific welding applications. Exceptional dexterity and flexibility.

Extra Heavy-Duty MIG/Stick

#263 350 Large
#263 351 X-Large

- ***An industry first!*** Silicone patches on back for heat and spatter protection
- Multi-layered insulated palm and back
- Dual-padded, pig grain palm for added comfort

Heavy-Duty MIG/Stick

#263 339 Large
#263 340 X-Large
#269 615 2X-Large

- Strategically placed patches on palm and back for extended glove life
- Double-layered insulated palm and back
- Pig grain leather palm provides extreme durability and protection

MIG (Lined)

#263 330 X-Small (Women's)
#263 331 Small (Women's)
#263 332 Medium
#263 333 Large
#263 334 X-Large
#269 618 2X-Large

- Dual-padded palm
- Fleece insulated palm, foam insulated back
- Cow grain palm, pig split back and goat grain inner fingers provide exceptional dexterity and comfort

TIG

#263 345 X-Small (Women's)
#263 346 Small (Women's)
#263 347 Medium
#263 348 Large
#263 349 X-Large

- Completely unlined for heightened feel and dexterity
- Triple-padded palm for added comfort
- Goat grain leather offers superior flexibility and dexterity

Work

#266 041 Medium
#266 042 Large
#266 043 X-Large

- Dual-padded palm for added durability
- Fleece back provides ultimate insulation
- Cow grain leather offers superior durability and abrasion resistance

Heavy-Duty MIG/Stick (Long Cuff)

#263 342 X-Large

- Padded forearm for additional protection and comfort
- Triple-layered insulated back
- Strategically placed patches on pig grain palm and cow split back for extended glove life

MIG/Stick

#263 343 Large
#263 344 X-Large
#269 616 2X-Large

- Dual-padded palm for added comfort
- Wool back provides ultimate insulation
- Cow split leather provides extreme durability and protection

MIG (Unlined)

#263 335 Medium
#263 336 Large
#263 337 X-Large
#269 619 2X-Large

- Unlined palm for heightened feel and dexterity
- Double-layer insulated back and dual-padded palm for added comfort
- Cow grain palm, cow split back and goat grain inner fingers provide exceptional dexterity and comfort

TIG/Multitask

#263 352 Small
#263 353 Medium
#263 354 Large
#263 355 X-Large

- Dual-padded palm for added comfort
- Wool back provides ultimate insulation
- Goat grain leather offers superior flexibility and dexterity

Metalworker

#251 066 Medium
#251 067 Large
#251 068 X-Large

- Durable top grain leather and spandex back for enhanced durability and dexterity
- Neoprene wrist with hook-and-loop closure increases fit and support
- Padded, reinforced palm and thumb saddle for extended wear

Classic – traditional design for the value-minded welder.

Heavy-Duty MIG/Stick

#271 877 Large
#271 887 X-Large

- Reflective insulation on back reduces heat impact
- Moisture-wicking fleece and foam insulation
- Pig grain palm, pig split back and cuff

MIG

#271 888 Large
#271 889 X-Large

- Reinforcement patches enhance durability
- Moisture-wicking fleece and foam insulation
- Pig split leather palm, back and cuff

MIG

#271 890 Large
#271 891 X-Large

- Reinforcement patches enhance durability
- Moisture-wicking fleece and foam insulation
- Goat split palm, pig split back and cuff

TIG

#271 892 Medium
#271 893 Large
#271 894 X-Large

- Thin internal padding for added comfort
- Unlined palm for precise dexterity
- Sheep grain palm, goat split back, pig split cuff

Respiratory

N95 Disposable Mask Respirator See literature no. AY/4.8

#267 334 Respirator, 10 pack
#267 334-2 Respirator, 2 pack
#267 335 Respirator with nuisance level OV relief, 10 pack
#267 335-2 Respirator with nuisance level OV relief, 2 pack

- Flame-retardant outer layer designed for welding applications
- Exhaust valve reduces heat build-up and user fatigue
- Ergonomic design and adjustable nose clip for customized fit
- Full inside foam seal enhances fit and overall protection
- Fit testing is required for mandatory use
- N95 filters provide 95-percent filtration of airborne particles, specifically: hexavalent chromium, zinc oxide, manganese, aluminum, cadmium and lead
- NIOSH 42 CFR 84 certified, assigned protection factor of 10

LPR-100™ Half Mask Respirator See literature no. AY/4.5

#ML00894 Respirator with P100 filters, small/medium
#ML00895 Respirator with P100 filters, medium/large
#ML00994 Respirator with P100 nuisance level OV relief filters, small/medium
#ML00995 Respirator with P100 nuisance level OV relief filters, medium/large

Filters and accessories

#SA00818 P100 filters, one pair
#SA00819 P100 nuisance level OV relief filters, one pair
#261 086 Quantitative fit-test kit adapter

- Low-profile design fits under most welding helmets and provides maximum field of vision
- Wrap-around spark guard protects filters from spatter and other debris
- Large exhaust valve eases breathing
- Odor-free, non-allergenic, latex and silicone free, made from medical-grade materials
- Exclusive pleated filter design provides additional surface area for extended filter life
- Fit testing is required for mandatory use
- P100 filters provide 99.97-percent filtration of airborne particles and oil aerosols, specifically: hexavalent chromium, zinc oxide, manganese, aluminum, cadmium and lead
- NIOSH 42 CFR 84 certified, assigned protection factor of 10

PAPR Powered Air-Purifying Respirator See literature no. AY/4.0

Available packages:

With hard hat

#261 659 With Titanium 9400i™ helmet
#259 385 With Titanium 9400™ helmet
#259 386 With hard hat only

With Titanium 9400i™ helmet

#264 877 With auto-darkening lens assembly
#264 878 Without auto-darkening lens assembly

With Titanium 9400™ helmet (external grind button)

#264 879 With auto-darkening lens assembly
#264 882 Without auto-darkening lens assembly

- Lightweight, low-profile blower design provides enhanced comfort and unrestricted movement
- Comfortable load-bearing shoulder straps reduce back strain
- Dual air speeds for maximized comfort in varied conditions
- Audible and vibrating alarms notify users in noisy environments
- HEPA filter provides 99.97-percent filtration of airborne particles and oil aerosols, specifically: hexavalent chromium, zinc oxide, manganese, aluminum, cadmium and lead
- NIOSH 42 CFR 84 certified, assigned protection factor of 25

Heat Stress

Note: Not compatible with XL Series™, Classic VSi™ and Titanium 9400i™ helmets.

CoolBand™ II Integrated Headgear Cooling System #261 970

- Up to **8 degrees Fahrenheit cooler** under the hood
- Strategically placed air vents reduce fogging
- Constant air movement removes stagnant air
- Comes with headgear (#256 174)

Note: Not compatible with XL Series™ helmets.

CoolBelt™ Belt-Mounted Cooling System #245 230

- Up to **17 degrees Fahrenheit cooler** under the hood
- Provides all-day comfort through maximized airflow power
- Multiple airflow speeds eliminate stagnant air and reduce fogging
- Lightweight design extends wearability

Choose the Right Fume Extractor

Miller's complete line of FILTAIR® fume extractors are designed specifically for welding – drawing weld fumes away from the user's breathing zone and keeping your facility clean. We offer many types of fume extraction equipment to best fit your environment and fume control needs.

For more detailed information, visit **MillerWelds.com/filtair**

FILTAIR	130	400	SWX	MWX	Capture 5	2000–12000
Weld Fume Extractor Type	Portable, high-vacuum	Stationary, high-vacuum suited for use with fume guns and/or attachments	Stationary, low-vacuum suited for wall or column mounting	Mobile, low-vacuum	Mobile, low-vacuum with the industry's largest capture zone	Centralized, low-vacuum customizable systems
Ideal For	Contractors, maintenance and repair operations, light fabrication work and light manufacturing	Fabrication, manufacturing, and maintenance and repair operations	Fabrication shops, manufacturing, and training centers where weld areas are near filtration system	Fabrication shops, manufacturing, and training centers	Manufacturing and fabrication – the best solution for weldments over 18 inches long	Manufacturing, hand-held and automation, fabrication shops, and training facilities
Welding Arcs	1	Up to 6 per unit	Up to 2 per unit	1	1	Up to 16 per unit
Filter Type	Manual cleaning	Self-cleaning (automatic)	SWX-D: Disposable SWX-S: Self-cleaning	MWX-D: Disposable MWX-S: Self-cleaning	Self-cleaning (automatic)	Self-cleaning (automatic/programmable)

FILTAIR® 130 and 400

See literature no. AY/3.1 (130) and AY/3.3 (400)

Portable (130 model) and stationary (400 model) high-vacuum weld fume extractors designed for use with accessories like nozzles and fume guns to collect weld fume particles at the source.

FILTAIR 130 (includes 8-ft. collection hose)

FILTAIR 400 (collection hoses not included, order separately)

Features common to all models

Designed to capture weld fume. The MERV 15 rating of FilTek XL filters provides superior filtering of up to 95 percent of weld fume particulate.

FILTAIR 130 features

Unrivaled filtering performance. Designed to capture weld fume particles with a cleanable filter and safely deposit them in an integrated particle bin.

Less noise. Up to 70 percent quieter than some other extractors. Only 68.5 decibels at five feet.

Portable and compact. At only 46 pounds (21 kg) the vertical-shaped machine is easy to move around.

FILTAIR 400 features

Extraction flexibility. Capable of utilizing more than 60 feet of collection hose to extend accessories for fume extraction. Rigid ducting can be used to extend overall reach.

User flexibility. With four-port access, the unit can remain centrally located while providing mobility of source capture accessories.

Extract at the source. Designed for solid and flux-cored wires for most welding applications. MIG fume guns are available in models ranging from 300 to 600 amps.

Model/Stock Number	Accu-Rated™ Airflow	Sound Level	Motor	Input Power	Dimensions	Net Weight
FILTAIR 130 (#300 595)	132 cfm (62 L/sec.)	68.5 dBA at 5 ft. (1.5 m)	1 hp	115 V, 1-phase, 60 Hz at 11 A	H: 23 in. (584 mm) W: 12 in. (305 mm) D: 12 in. (305 mm)	46 lb. (21 kg)
FILTAIR 400 (#300 894)	400 cfm (189 L/sec.)	74 dBA at 5 ft. (1.5 m)	8.85 hp	460 V, 3-phase, 60 Hz	H: 54 in. (1372 mm) W: 26 in. (660 mm) D: 48 in. (1,219 mm)	551 lb. (250 kg)

Processes

- Stick (SMAW) • Flux-cored (FCAW)
- MIG (GMAW) • TIG (GTAW)

Comes with

- FilTek® XL filter
- 8 ft. collection hose (130 model only)
- 20 ft. power cord (130 model only)

Most popular consumables

- Replacement Filters
  #301 267 For 130 model (cleanable)
  #300 925 For 400 model

Most popular accessories

- Collection Hose
  #300 672 17 ft. (5.2 m)
  #300 673 34 ft. (10.4 m)

- **Magnetic Nozzles**
  #300 669 11.8 in. (300 mm) width
  #300 670 23.6 in. (600 mm) width (400 model only)

- **Flexible Funnel Magnetic Nozzle** #300 668
- **Dual Hose Inlet to Duct Adapter** (400 model only) #301 070 Y-shaped adapter connects duct to one or two hose attachments.

- **Bernard™ FILTAIR Fume Extraction MIG Gun** (pg 47) Ideally suited for almost any solid-wire welding application. Available in 300 and 400 A models.

- **Bernard™ Clean Air™ Fume Extraction MIG Gun** (pg 47) Suited for use with solid and flux-cored wires. Available in 400, 500 and 600 A models.

FILTAIR® SWX and MWX Series

See literature no. AY/3.2 (SWX) and AY/3.0 (MWX)

Powerful systems mounted next to the weld area or easily positioned near the weld area. Disposable or cleanable filter models for multiple applications.

SWX wall- or column-mounted fume extraction systems designed specifically for welding.

SWX-D (disposable filter) model with telescoping arm shown.

SWX models are available with telescoping arm which can extend from 3 to 4.5 feet, making them ideal for smaller spaces.

MWX mobile fume extraction systems designed specifically for welding.

MWX-S (self-cleaning) model with 10 ft. extraction arm shown.

Features common to all models

Designed to capture weld fume. The MERV 15 rating of FilTek XL filters provides superior filtering of up to 95 percent of weld fume particulate.

Class-leading suction power of 875 cfm is Accu-Rated™ at the hood to better capture weld fumes and provide a cleaner environment.

Superior filters. Our FilTek XL filters are specifically designed for welding with a MERV 15 rating to outlast, out-filter, and outperform all the rest.

Durable aluminum pre-assembled extraction arm with external adjustments for better airflow and longer life.

Self-cleaning models additional features

Unrivaled filtering performance. Designed to capture weld fume particles with a cleanable filter and safely deposit them in an integrated particle bin.

Quick and efficient cleaning cycle operates with a push of a button on the control panel.
Note: Compressed air required to operate cleaning mechanism.

Disposal drawer provides easy and convenient access to empty out collected particles. Handle releases drawer allowing it to slide out.

Upgrade to self-cleaning models for high arc-on time, extracting from heavy fume processes, or when welding aluminum or galvanized materials.

Processes

- Stick (SMAW) • Flux-cored (FCAW)
- MIG (GMAW) • TIG (GTAW)

Comes with

- FilTek® XL filter
- Pre-assembled arm

Most popular consumables

- **Replacement Filters**

#300 540
Self-cleaning models
#300 539
Disposable filter models

FilTek XL filters efficiently capture the smallest weld fume particles and offer superior filter life.

Most popular accessories

- **Hood Light with Arc Sensor**

#300 763
For SWX Series
#300 689
For MWX Series

Illuminates the welding zone and enables the fume extractor to start automatically when welding begins.

- **SWX Dual-Arm Add-On Packages**

#951 621 With telescoping arm
#951 519 With 7 ft. standard arm
#951 520 With 10 ft. standard arm
#951 521 With 12 ft. standard arm

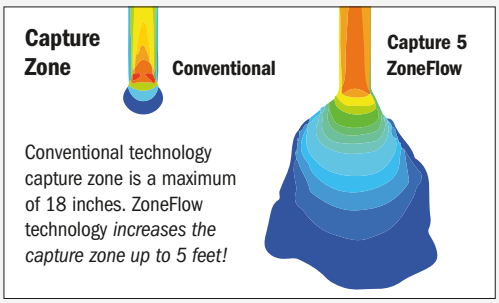
Includes 8-inch diameter arm, blower, control box, mounting bracket, duct and back draft dampers to turn single-arm weld fume extractor into dual-arm extractor.

Model/Stock Number		Filter Media	Accu-Rated™ Airflow	Extraction Arm Diameter	Sound Level	Motor	Input Power	Dimensions	Net Weight without Arm
SWX-S (Self-Cleaning Model) Pkg **(#951 620)** Telescoping arm **(#951 516)** 7 ft. standard arm **(#951 517)** 10 ft. standard arm **(#951 518)** 12 ft. standard arm	**SWX-D (Disposable Filter) Pkg** **(#951 619)** Telescoping arm **(#951 513)** 7 ft. standard arm **(#951 514)** 10 ft. standard arm **(#951 515)** 12 ft. standard arm	490 sq. ft. (45.52 sq. m)	875 cfm (413 L/sec.)	8 in. (203 mm)	Approximately 74 dBA at 5 ft. (1.5 m)	1 hp, 3,450 rpm	115 V, 1-phase, 60 Hz at approximately 11.9 A	SWX-S H: 33 in. (838 mm) SWX-D H: 29 in. (737 mm) W: 27.25 in. (692 mm) D: 33 in. (838 mm)	**SWX-S** 195 lb. (88 kg) **SWX-D** 130 lb. (59 kg) **Blower/bracket** 95 lb. (43 kg)
MWX-S (Self-Cleaning Model) Pkg **(#951 510)** 7 ft. standard arm **(#951 511)** 10 ft. standard arm **(#951 512)** 12 ft. standard arm	**MWX-D (Disposable Filter) Pkg** **(#951 507)** 7 ft. standard arm **(#951 508)** 10 ft. standard arm **(#951 509)** 12 ft. standard arm	490 sq. ft. (45.52 sq. m)	875 cfm (413 L/sec.)	8 in. (203 mm)	Approximately 70 dBA at 5 ft. (1.5 m)	1 hp, 3,450 rpm	115 V, 1-phase, 60 Hz at approximately 11.9 A	H: 34.75 in. (883 mm) W: 31.75 in. (806 mm) D: 48 in. (1,219 mm)	**MWX-S** 300 lb. (136 kg) **MWX-D** 238 lb. (108 kg)

FILTAIR® Capture 5

See literature no. AY/3.5

The capture zone redefined. Innovative, extended-capture fume extraction system designed specifically for welding.



ZoneFlow™ technology. Extends the capture area up to five feet versus 12 to 18 inches with conventional source capture arms. See illustration above.

Minimizes downtime with fewer fume extractor adjustments. With increased capture area, arm interactions are dramatically minimized.

Designed to capture weld fume. The MERV 15 rating of FilTek XL filters provides superior filtering of up to 95 percent of weld fume particulate.

Source capture is designed to draw weld fume away from the welder's breathing zone and keep the facility clean.

Processes

- Stick (SMAW) ▪ Flux-cored (FCAW)
- MIG (GMAW) ▪ TIG (GTAW)

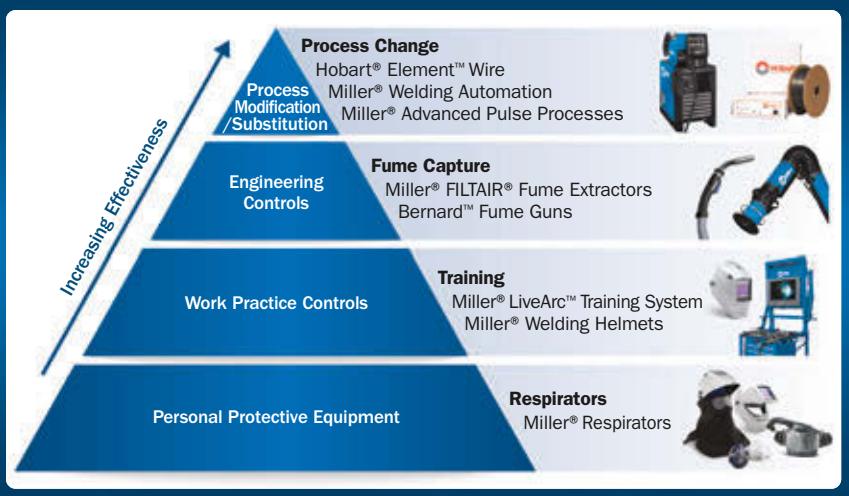
Comes with

- FilTek® XL filter
- Durable, easy-to-move, pre-assembled, aluminum extraction arm with toolless external adjustments for higher airflows and longer filter life

Most popular consumable

- **Replacement FilTek XL Filter**
  #301 106
  Filter is designed for the Capture 5 automatic self-cleaning system.

Stock Number		Filter Media	Accu-Rated™ Airflow	Extraction Arm Diameter	Sound Level	Motor	Input Power	Dimensions	Net Weight
With 10 ft. Extraction Arm **(#951 639)** 208/230 V **(#951 574)** 460 V **(#951 594)** 575 V	**With 12 ft. Extraction Arm** **(#951 640)** 208/230 V **(#951 575)** 460 V **(#951 595)** 575 V	452 sq. ft. (42 sq. m)	900 cfm (425 L/sec.)	10 in. (254 mm)	Approximately 77 dBA at 5 ft. (1.5 m)	3 hp, 3,450 rpm	208/230 V, 1-phase, 60 Hz at 13.5 A 460 V, 3-phase, 60 Hz at 3.7 A 575 V, 3-phase, 60 Hz at 3.0 A	H: 43 in. (1,092 mm) W: 36 in. (915 mm) D: 48 in. (1,219 mm)	620 lb. (282 kg) with 12 ft. arm



Weld Fume Management

We are committed to providing exclusive technologies designed specifically around your weld fume challenges. Find out how our portfolio of solutions fulfills each tier of OSHA's Hierarchy of Controls at **MillerWelds.com/fumesolutions.**

FILTAIR® 2000–12000

See literature no. AY/3.4

The industrial centralized weld fume extractors are custom engineered solutions designed for multiple capture sources which require ducting and accessories to complete the system.

FILTAIR 4000 model shown. Other models are available (2000, 6000, 8000, and 12000).

Call us toll-free at 855-FILTAIR (855-345-8247) for information and requests for quotes on custom engineered solutions to fit your needs.

FILTAIR engineering resources. Design and engineering resources recommend, develop and support custom-engineered solutions.

Improves operating efficiency. Creates a cleaner shop with less downtime spent cleaning equipment. Raises productivity with more motivated employees and fewer absences and helps meet OSHA and EPA compliance.

Stand-alone space saver. Our fully assembled fume extractor provides up to a 65 percent smaller footprint versus traditional cartridge-style extractors. It provides all the necessary extraction tools, while offering customizable options.

Less noise. Up to 75 percent quieter than cartridge-style extractors. High-efficiency motors and integrated silencer housing create a quieter, more productive work area.

Integrated electrical controls. Control panel manages all of the collector functions, including the fan, the filter differential, and the pulse cleaning system.

24 VDC motor start/stop feedback relay allows an external signal to automate the remote start of collector fan from other equipment.

FilTek XL filters

Easy-clean filter with surface-loaded filter technology allows for more effective weld fume pulse cleaning without penetration into the filter. This provides an easier filter cleaning process, while outlasting conventional cartridge filters.

Smaller size and fewer filters. One FilTek XL filter replaces up to three cartridge-style filters increasing efficiency, reducing extractor size, and lowering operational costs.

Processes

- Stick (SMAW) ▪ Flux-cored (FCAW)
- MIG (GMAW) ▪ TIG (GTAW)

Custom solutions

- Configured to source fume extraction
- Configured for ambient push-pull collection

Comes with

- FilTek® XL filter
- Top **or** front air inlet
- Configured for indoor **or** outdoor mounting (outdoor models are wind load and seismic rated and include remote-mounted control box)

Most popular consumable

- **Replacement High-Efficiency Filter** #300 927

Most popular accessories

- Extraction Arms (pg 104)
- Arm Mounting Bracket Kit (pg 104)
- Low Profile Hoods (pg 104)
- Call us toll-free at 855-FILTAIR (855-345-8247) for information on factory options such as HEPA filter kit, weather hood, Spark Cooler® and integration services.

**Based on clean filters. **Dimensions for base models without factory options.*

Model	Nominal Airflow Range*	Number of Filter Packs	Sound Level	Input Power	Dimensions** (H x W x D)			Ship Weight
FILTAIR 2000	960–3,200 cfm (453–1,510 L/sec.)	2	72–75 dBA at 5 ft. (1.5 m) Peak pulse cleaning is 92.7 dBA at 5 ft. (1.5 m)	230, 460 or 575 V, 3-phase, 60 Hz	66.6 in. (1,692 mm)	31.2 in. (792 mm)	83.2 in. (2,113 mm)	1,300 lb. (590 kg)
FILTAIR 4000	1,920–5,500 cfm (906–2,596 L/sec.)	4			86.1 in. (2,187 mm)	31.2 in. (792 mm)	83.2 in. (2,113 mm)	1,600 lb. (726 kg)
FILTAIR 6000	2,880–8,640 cfm (1,359–4,078 L/sec.)	6			117.2 in. (2,977 mm)	31.2 in. (792 mm)	83.2 in. (2,113 mm)	2,250 lb. (1,021 kg)
FILTAIR 8000	3,840–11,520 cfm (1,812–5,437 L/sec.)	8			135 in. (3,429 mm)	37.2 in. (945 mm)	83.2 in. (2,113 mm)	2,900 lb. (1,315 kg)
FILTAIR 12000	5,760–13,440 cfm (2,718–6,343 L/sec.)	12			120.3 in. (3,056 mm)	59.7 in. (1,516 mm)	83.2 in. (2,113 mm)	3,900 lb. (1,769 kg)

FILTAIR® Industrial Centralized Systems Accessories

Miller offers a full line of accessories for complete system solutions and turnkey installation.

Telescoping arm

Standard arm

Arm mounting bracket and ducting kit

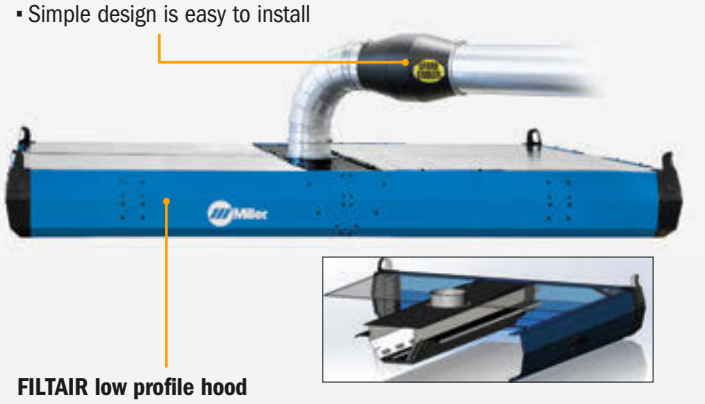
Easy-to-operate, pre-assembled extraction arms and mounting equipment

- **Telescoping arms** are designed to fit small booth spaces used in training centers and educational booths. Telescopes from 3 to 4.5 feet with a wide range of motion to cover all positions
- **Standard arms** are designed to cover larger spaces, the standard extraction arms are available in 7-, 10-, and 12-foot versions. External brackets and adjustments allow air to pass through with less resistance giving you stronger cfm (airflow)
- **Arm mounting bracket and ducting kit** includes a supporting bracket and collar for connecting an extraction arm to ductwork

Model	6-Inch Diameter	8-Inch Diameter
Telescoping Arm	(#301 242)	(#301 237)
Standard Arm	**(#300 953)** 7 ft. arm **(#300 954)** 10 ft. arm **(#300 955)** 12 ft. arm	**(#300 980)** 7 ft. arm **(#300 981)** 10 ft. arm **(#300 982)** 12 ft. arm
Arm Mounting Bracket and Ducting Kit	(#300 952)	(#300 771)

Spark Cooler®

- Cools sparks using the fume extractor's airflow
- Very efficient – maximizes the extractor's power
- Simple design is easy to install



FILTAIR low profile hood

- Available in sizes from 4 x 4 feet up to 16 x 16 feet in one-foot increments
- Exclusive design – capture velocity zone is maximized and distributed over the work area
- Hood airflow design reduces sound for better communication
- Unique airflow offers spark abatement in the extraction rail, and also in the recommended Spark Cooler
- Clear, UV-protected polycarbonate ceiling panels allow maximum light into the cell
- Corner lift hooks are convenient for installing or hanging over a work area. The hood can also be placed on an existing cell enclosure or supported with post assemblies

More FILTAIR accessories are available to build your system. Call us toll-free at 855-FILTAIR (855-345-8247) for information.

Cleaner air with FilTek® XL filters

The FilTek XL filter's higher MERV rating means unrivaled filtering performance.

MERV Comparison

Applicable Weld Fume MERV Rating Categories[1]	Particle Size Range Efficiency %[2]		
	0.3 to 1 µm	1 to 3 µm	3 to 10 µm
10	Not Rated	50–65%	85%
11	Not Rated	65–80%	85%
12	Not Rated	80–90%	85%
13	<75%	90%	90%
14	75–85%	90%	90%
15 Miller® FilTek XL	85–95%	90%	90%
16 Miller® FilTek XL	≥95%	≥95%	≥95%
HEPA[3]	≥99.97%	≥99.97%	≥99.97%
Weld Fume Composition[4]	75–95%	≤15%	≤10%

Filters are rated on a MERV scale, which measures filter efficiency based on particle count. MERV ratings range from 1–16, with 16 being the best at filtering small particles – such as those found in weld fumes. The vast majority of weld fumes are less than one micron in diameter, or roughly 1/100th the width of a human hair.

Filters in common air filtration systems often have MERV ratings between 7–11. FilTek XL filters are rated at class-leading MERV 15–16 to capture up to 95 percent of weld fume particulates including those found in hexavalent chromium.

[1] *American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) 52.2*
[2] *National Air Filtration Association (NAFA) Guide*
[3] ***HEPA filters are depth loading and have high restrictions to air flow, reducing system performance versus FilTek XL filters.***
[4] *Jenkins, Pierce, Edgar, Particle Size Distribution of GMAW and FCAW*

MORE on the WEB

For more detailed information, visit **MillerWelds.com/arcstation**

Workstations

Count on Miller to design the perfect workbench to make welding projects faster and easier. The Miller® ArcStation is the first-ever, all-in-one workstation designed for welding and metalworking. It's versatile, affordable and just the right height to work comfortably. You can organize equipment, tools, and raw materials into one convenient workspace. And you can also customize your workbench with a wide range of handy accessories.

S-Series ArcStation™

*Fully loaded 60SX model **(#951 413)** shown. See below for other models.*

The S-Series is perfect for the welder who needs a tough workbench for the fab shop or the home garage.

Four S-Series models available, depending on your needs:

- 30S (30 x 30 inch with solid tabletop)
- 30SX (30 x 30 inch with X-pattern tabletop)
- 60S (30 x 60 inch with solid tabletop)
- 60SX (30 x 60 inch with X-pattern and solid tabletop combo)

SX model includes X-pattern tabletop for trouble-free clamping!

Durable 1/8-inch steel frame with cross bar and heavy-duty tabletops provide a sturdy area for welding or metalworking.

Lower shelf provides a convenient place to store equipment, tools and raw materials.

Adjustable leveling feet keep bench rock-steady.

Customize with a wide range of handy accessories to make this the *ultimate* workbench (see at right).

F-Series ArcStation™

*Shown with **optional** 5-inch X-clamps.*

When portability or space-savings is a concern, the F-Series ArcStation is your solution.

Wheels, handle, and fold-up design make unit easy to take to the jobsite or move around the shop.

Compact size makes storing unit a breeze. Unit folds down to 6 x 29 x 48 inches (152 x 737 x 1219 mm).

30 x 30 inch size tabletop provides plenty of work surface.

3/16-inch X-pattern steel tabletop allows trouble-free clamping.

1.5-inch diameter steel tube frame provides strength and durability.

Includes removable gun holder.

Add the optional 5-inch X-clamps (#300 850) to make this the *ultimate* portable workbench.

S-Series accessories

Miller ArcStation accessories allow you to get the most out of your ArcStation.

1. X-clamps
   #300 613 6-inch
   #300 850 5-inch
2. Side shelf #300 680
3. Tool chest with ball-bearing slides #300 610
4. Interior shelf #300 679
5. Quick-remove vise
   #300 611 5-inch vise and mount
   #300 612 Mount only
6. Weld curtain
   #300 685 30S series
   #300 686 60S series
7. Casters
   #300 849

Convenience kit #300 614 includes the following:

8. Gun holder
9. Tool holder
10. Clamp bar

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

F-Series accessories

5-inch X-clamps #300 850

Model/Stock Number	30FX (#300 837)	30S (#951 167)	30SX (#951 168)	60S (#951 169)	60SX (#951 170) 60SX Fully Loaded (#951 413)
Steel Top	(1) 29 x 29 x 3/16 in. X-pattern	(1) 29 x 29 x 3/16 in. solid	(1) 29 x 29 x 3/8 in. X-pattern	(2) 29 x 29 x 3/16 in. solid	(1) 29 x 29 x 3/8 in. solid (1) 29 x 29 x 3/8 in. X-pattern
Load Capacity	500 lb. (227 kg)	1,000 lb. (454 kg)	1,000 lb. (454 kg)	1,000 lb. (454 kg)	1,000 lb. (454 kg)
Dimensions	35 x 29 x 35 in. (889 x 737 x 889 mm)	35 x 29 x 29 in. (889 x 737 x 737 mm)	35 x 29 x 29 in. (889 x 737 x 737 mm)	35 x 58 x 29 in. (889 x 1,473 x 737 mm)	35 x 58 x 29 in. (889 x 1,473 x 737 mm)
Weight	74 lb. (34 kg)	123 lb. (56 kg)	177 lb. (80 kg)	230 lb. (104 kg)	318 lb. (144 kg)

Accessories

For more detailed information, visit **MillerWelds.com/accessories**

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- Spool Adapter
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- Turntable Assembly
- Wire Straightener

Automated MIG

For adapters and drive motors, visit MillerWelds.com.

Coolant Flow Switch
#195 461
For Auto-Axcess. To ensure coolant is flowing in the system. Lack of coolant flow may cause damage to water-cooled guns. Module allows wiring into the peripheral connector port. 50-foot (15.2 m) cable with connector and separate shell connector for simple modification to desired length in the field. It can be mounted on Auto-Axcess or as desired elsewhere. Quarter-turn quick connection.

MCS-2 Motorized Cross Slide
#098 380 Control
#045 623 Adapter Plate*
Provides accurate weld head adjustment with convenient motorized control. Used to align the welding head (gun) to the weld joint, by providing vertical or horizontal adjustments, based on mounting preferences.
**Required when using two slides.*

Cable Connectors and Adapters

Also see Torch and Weld Cable Connectors in TIG Accessories on page 113.

For Invision 352 MPa, AlumaFeed System, XMT 304/350, CST 280, Maxstar, Dynasty, and Syncrowave. These power sources are equipped with Dinse- or Tweco-style connectors for secondary connections. Power sources are shipped with two male plugs for use with #4 to #1/0 AWG cable.

Dinse-Style Connector Kits
#042 418 Accepts #4 to #1/0 AWG cable
#042 533 Accepts #1/0 to #2/0 AWG cable
Kits include one male Dinse-style plug which attaches to the work and/or weld cables and plugs into the Dinse-style receptacles on the power source.

Extension Kit for Dinse-Style Cable Connectors
#042 419 Accepts #4 to #1/0 AWG cable
Used to adapt or extend weld and/or work cables. Kit includes one male Dinse-style plug and one in-line female Dinse-style receptacle.

Extensions for Dinse-Style Cable Connectors
#134 460 Male Dinse-style plug
#136 600 Female Dinse-style receptacle
Used to adapt or extend weld and/or work cables. Accepts #1/0 to #2/0 AWG cable.

Tweco®-Style Connector
#191 981
Accepts #1/0 to #2/0 AWG cable. Kit includes one Tweco-style male plug which attaches to the work and/or weld cables and plugs into the Tweco-style receptacles on the power source.

Dinse/Tweco® Adapter #042 465
Dinse/Cam-Lok Adapter #042 466
One-piece adapter with Dinse-style male plug (to power source) on one end and Tweco or Cam-Lok female receptacle (for weld cable connection) on other end.

Tweco®/Dinse Adapter #210 061
One-piece adapter with Tweco-style male plug (to power source) on one end and Dinse-style female receptacle (for weld cable connection) on other end.

Carts, Cylinder Racks and Running Gear

Also see Engine Drive Accessories on page 108 and Plasma Accessories on page 110.

Carrying Cart #056 301
For XMT, CST 280, smaller Maxstar/Dynasty, and wire feeders. Cart is 34 inches high x 30 inches wide x 17 inches deep (864 x 762 x 432 mm).

Cylinder Cart #042 537
For Invision, XMT, and CST 280. Has adjustable handles and is slanted for convenient access to power source front panel controls. Carries two 160-pound (72.6 kg) gas cylinders with feeder mounted to tray above power source. Accommodates Coolmate 3 or 4 coolant system.

Universal Cart and Cylinder Rack #042 934
For Invision 352 MPa, XMT 304/350, CST 280, Diversion, Maxstar 210/280, and Dynasty 210/280. Also accommodates a single gas cylinder up to 56 inches (142.2 cm) high measuring 6 to 9 inches (15.2 to 22.8 cm) in diameter. Provides storage for auxiliary items such as electrodes, helmets and gloves.

Feeder Cart #142 382
A low-profile, creeper cart which allows the operator to easily move the feeder around the work area.

Running Gear/Cylinder Rack
#301 239
For Millermatic 125 Hobby, 141, 190, 211, and Diversion. Heavy-duty construction with 8-inch rubber rear wheels. Convenient front handles, cable holders and plastic consumable box. For gas cylinders no greater than 7 inches (178 mm) in diameter or 65 pounds (29.5 kg) in weight.

Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack #300 337
For Millermatic 212 Auto-Set and 252, and Syncrowave 210. Allows operators to easily roll cylinders on and off the rack with no lifting. Gun and cable rack keeps cables off the floor and tangle free.

Elevated Gun and Cable Rack #300 335
For Millermatic 212 Auto-Set and 252, and Syncrowave 210. For use with single-cylinder rack. *(Included with Dual EZ-Change Low Cylinder Rack.)*

Dual Cylinder Rack #195 299
For Millermatic 350P and 350P Aluminum. Replaces single-cylinder rack.

Shown with optional cylinder rack (#042 887).

Standard Running Gear and Cylinder Rack
#042 886 Running gear
#042 887 Cylinder rack
For CP-302, Deltaweld, Dimension 302/452, and Gold Star. Running gear has 10-inch (254 mm) rear wheels and 5-inch (127 mm) front casters for excellent mobility on the shop floor. Very easy to install. Handles double as a cable holder. Cylinder rack only installs on Standard Running Gear.

MIGRunner™ Cart #195 445
For Invision, AlumaFeed system, and XMT with single feeders. Small footprint and easily maneuverable, with a dual-cylinder rack low enough that you do not have to lift bottles. Durable, heavy-duty ergonomic handles are designed for comfort.

Running Gear Cylinder Rack #300 408
For Invision, Axcess 300/450, Dimension 650, and XMT with single or dual feeders. Holds two large gas cylinders and has gun cable hangers and a consumable drawer in front. A convenient handle allows the cart to be pulled easily through doorways. Power source and single or dual feeders can be mounted to cart and secured.

Continuum Running Gear/ Cylinder Rack #301 264
For Continuum 350 and 500. Small footprint and easily maneuverable, with cylinder rack low enough that you do not have to lift bottles.

Shopmate 300 Running Gear/Dual Cylinder Rack #300 145
For Shopmate 300 DX. The large 10-inch (254 mm) rear wheels and 5-inch (127 mm) front casters on this running gear provide excellent mobility on the shop floor, making it easier to move the power source. Very easy to install. Handles double as a cable holder. Holds two cylinders.

Dimension 650 Running Gear #301 307
For Dimension 650. Large 10-inch (254 mm) rear wheels and 5-inch (127 mm) front casters provide excellent mobility. Easy to install. Compatible with single and dual 70 Series feeders. Handles double as a cable holder.
Note: Does not accommodate gas cylinders. Use Running Gear Cylinder Rack (#300 408) when gas cylinders are required.

Thunderbolt XL Running Gear #043 927
For Thunderbolt XL. Mounts easily to unit and provides convenient portability. Includes two wheels, two feet and a handle.

2-Wheel Trolley Cart #300 971
For Maxstar 210/280 and Dynasty 210/280 with or without Coolmate 1.3. Easy-to-maneuver two-wheel cart features single-cylinder rack, chain for cylinder, straps (quick and easy to detach and carry machine), cable holders, torch holder, storage area, and filler rod storage area.

Small Runner™ Cart #301 318
For Maxstar 210/280 and Dynasty 210/280 with or without Coolmate 1.3. Cart features single-cylinder rack, foot pedal holder, two cable/torch holders and two TIG filler holders.

Runner™ Cart #300 244
For Maxstar 350/700 and Dynasty 350/700 with or without Coolmate 3.5. Cart features single-cylinder rack, foot pedal holder, three cable/torch holders and two TIG filler holders.

No. 37 Running Gear #195 282
For Syncrowave 250 DX/350 LX. Includes two 10-inch (254 mm) wheels, two 5-inch (127 mm) casters, two-compartment rack for gas cylinders, and handles. Provides excellent mobility and easy to install.

Coolant Systems

See literature no. AY/7.2 1 Phase

Coolmate 3 Coolmate 1.3 Coolmate 3.5 Coolmate 4

**May vary with torch design and cable length. Miller coolant systems are backed by the best warranty in the industry — one full year.*

Coolmate™ 1.3 #300 972 115 V
For Maxstar 210/280 and Dynasty 210/280. Light industrial, 1.3-gallon cooler designed for water-cooled torches on power sources rated up to 280 amps*.

Coolmate™ 3 #043 007 115 V **#043 008** 230 V
Economical, 3-gallon cooler designed for water-cooled torches rated up to 500 amps*.

Coolmate™ 3.5 #300 245 115 V
For Maxstar 350/700 and Dynasty 350/700. Industrial, 3.5-gallon cooler designed for water-cooled torches rated up to 600 amps*.

Coolmate™ 4 #042 288 115 V
Best performer in its class — industrial, 4-gallon cooler designed for water-cooled torches rated up to 600 amps*.

Coolant

Sold in multiples of four in 1-gallon recyclable plastic bottles. Miller® coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37° Fahrenheit (-38°C) or boiling to 227° Fahrenheit (108°C).

Low-Conductivity Coolant (clear, pre-mixed) #043 810
For TIG and MIG applications. NOT for use in push-pull systems or systems where aluminum is in coolant path/circuit.

Aluminum-Protecting Coolant (green, pre-mixed) #043 809
Primarily used in push-pull systems where aluminum is in coolant path/circuit and high frequency is NOT used.

Model	Motor Input Voltage	Maximum Current Draw	Maximum Cooling Capacity	IEC Cooling Capacity	Tank Capacity	Dimensions	Net Weight
Coolmate 1.3	115 V, 60 Hz	4.7 A (60 Hz)	3,400 W (11,600 Btu/hr.) 3.8 qt./min. (3.6 L/min.)	1,330 W (4,540 Btu/hr.) 1.1 qt./min. (1 L/min.)	1.3 gal. (4.9 L)	H: 11.25 in. (286 mm) W: 10.38 in. (264 mm) D: 24 in. (610 mm)	43 lb. (20 kg)
Coolmate 3	115 V, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	3,820 W (13,000 Btu/hr.) 4.2 qt./min. (4.0 L/min.)	1,420 W (4,840 Btu/hr.) 1.1 qt./min. (1 L/min.)	3 gal. (11.4 L)	H: 13.25 in. (337 mm) W: 12.25 in. (311 mm) D: 23.25 in. (584 mm)	40 lb. (18 kg)
	230 V, 50/60 Hz	2.5 A (50 Hz), 3.0 A (60 Hz)					
Coolmate 3.5	115 V, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	4,140 W (14,000 Btu/hr.) 5.0 qt./min. (4.7 L/min.)	1,660 W (5,660 Btu/hr.) 1.1 qt./min. (1 L/min.)	3.5 gal. (13.2 L)	H: 11.75 in. (298 mm) W: 15.75 in. (400 mm) D: 26 in. (660 mm)	64 lb. (29 kg)
Coolmate 4	115 V, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	5,500 W (18,000 Btu/hr.) 5.9 qt./min. (5.6 L/min.)	1,780 W (6,070 Btu/hr.) 1.1 qt./min. (1 L/min.)	4 gal. (15 L)	H: 16.25 in. (413 mm) W: 15.25 in. (387 mm) D: 18.75 in. (476 mm)	38 lb. (17 kg)

Accessories

Engine Drive Accessories

Also see Trailers on page 109 and HF Arc Starters on page 112.

Big Blue Accessories

Cable Holder #043 946
For Big Blue 500 and 600 Pro, 700 Duo Pro, and 800 Series.

Vandalism Lockout Kit #399 802 Field
For Big Blue 500 and 600 Pro, and 700 Duo Pro. Lockable hinged steel panels cover and protect name plate gauges and ignition switch (padlock included). Also includes engine compartment door lock and key.

Blue Star Accessories

Lifting Eye #195 353
*For **current model** Blue Star 185.*

Running Gear #301 246
*For **current model** Blue Star 185.* Compact and balanced, lightweight wheelbarrow-style running gear provides easy onsite mobility.

Bobcat and Trailblazer Accessories (Gas/LP)

Multi-Terrain Running Gear
#300 913 Inner tubes.
#300 914 Never Flat™ tires.
For gas/LP Bobcat and Trailblazer. Includes two heavy-duty 15-inch tires, two 8-inch rubber swivel casters and a heavy-duty handle. Recommended for all surfaces and applications and is easy to move around the jobsite.

Off-Road Running Gear
#300 909 Inner tubes.
#300 910 Never Flat™ tires.
For gas/LP Bobcat and Trailblazer. Includes four heavy-duty 15-inch tires and a rugged handle to provide maximum maneuverability.

Off-Road Running Gear with Protective Cage and Never Flat™ Tires
#300 912
For gas/LP Bobcat and Trailblazer. Running gear and rugged cage with cable holders protects your investment and is easy to move around the jobsite.

Protective Cage with Cable Holders
#300 921 *For gas/LP Bobcat and Trailblazer.*
#300 473 *For Trailblazer 302 Air Pak.*
Rugged cage with cable holders protects your investment. Works with Running Gear, Gas Cylinder Mounting Assembly or LP Tank Mounting Assembly.

Gas Cylinder Mounting Assembly #300 918
For gas Bobcat and Trailblazer. Designed for use with Running Gear, Protective Cage, or by itself. Includes base tray with bottle bracket, vertical support rack and safety chain.
Note: Not for use with LP Tank Mounting Assembly. Not recommended for use with Protective Cover.

Hose and LP Tank Mounting Assembly #300 917
For LP Bobcat and Trailblazer. Designed for use with Running Gear, Protective Cage, or by itself. Includes bracket and clamp to mount 33- and 43-pound tanks horizontally, and hose with fittings to converter.
Note: Cannot be used with Gas Cylinder Mounting Assembly. Not recommended for use with Protective Cover.

Remote Oil Drain and Filter Kit #300 923 Field
For gas Bobcat and Trailblazer. Front mount for Kohler engines makes servicing easy when engine drive is mounted in tight spots.

Bobcat and Trailblazer Accessories (Diesel)

All-Purpose Running Gear with Never Flat™ Tires #300 477
For diesel Bobcat and Trailblazer. Includes two heavy-duty 15-inch tires, two 8-inch rubber swivel casters and a heavy-duty handle. Recommended for all surfaces and applications and is easy to move around the jobsite.

Protective Cage with Cable Holders #195 331
For diesel Bobcat and Trailblazer. Rugged cage with cable holders protects your investment. Works with Running Gear, Gas Cylinder Mounting Assembly or with trailer.
Note: Not for use with Protective Cover.

Gas Cylinder Mounting Assembly #195 330
For diesel Bobcat and Trailblazer. Designed for use with Protective Cage, or by itself. Includes base tray with bottle bracket, vertical support rack and safety chain.
Note: Not recommended for use with Protective Cover.

Generator Accessories

Female Receptacle

Full KVA Adapter Cord #300 517
For Bobcat, Trailblazer, and Big Blue models. NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240-volt plug to common Millermatic and Spectrum 240-volt plug.

Single-Phase Full KVA Plug Kit #119 172
For Bobcat, Trailblazer, and Big Blue models. Can be wired for 120- or 240-volt loads.

Three-Phase Full KVA Plug Kit
#165 963 *For Bobcat 3 Phase.*
#254 140 *For Big Blue 500 and 600 Pro, 700 Duo Pro, and 800 Series.*

Protective Covers

#300 919 and #195 301 covers shown.

Protective Covers
Heavy-duty, water- and mildew-resistant covers protect and maintain the finish of the welder.

#301 245 *For **current model** Blue Star 185.*
#300 919 *For **current model** gas Bobcat and Trailblazer (except Air Pak) **without** Protective Cage or Running Gear.*
#300 920 *For **current model** gas Bobcat and Trailblazer (except Air Pak) **with** Protective Cage or Running Gear.*
#301 099 *For **current model** diesel Bobcat and Trailblazer **without** Protective Cage or Running Gear.*
#300 379 *For Trailblazer 302 Air Pak.*
#195 301 *For Big Blue 350 PipePro, 400 Pro, and 450 Duo CST.*
#194 683 *For Big Blue 500 Pro (CA model) and 700 Duo Pro.*
#301 113 *For Big Blue 500 Pro (T4F model), 600 Pro, and 800 Series.*

Trailers

See literature no. AY/20.0

HWY-1000 Trailer #195 013
For Bobcat and Trailblazer (except Air Pak model). A 1,000-pound (454 kg) capacity highway trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension. Includes jack stand, 2-inch (50 mm) ball hitch, fenders and lights.

4 West Four-Wheel Steerable Off-Road Trailer #042 801
For Big Blue 500 and 600 Pro, 700 Duo Pro, and 800 Series. Heavy-duty 2,570-pound (1,166 kg) capacity trailer designed for use in mines, quarries, and other rough terrain. Has narrow 22-foot (6.7 m) turning radius. Includes 3-inch lunette eye, universal hitch and safety chains.

HWY-224 Trailer #043 805
For Bobcat, Trailblazer, and Big Blue models. A 2,650-pound (1,202 kg) capacity trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension. Includes jack stand and 2-inch (50 mm) ball hitch. HWY-224 also includes fenders and lights.

*Note: Trailers are shipped unassembled. *Width at outside of fenders. **Does not include tongue.*

Model	Gross Axle Weight Rating	Gross Vehicle Weight Rating	Net Payload	Height of Bed	Road Clearance	Track (Center to Center of tires)	Standard Tires (Standard Rating or P-size Rating)	Dimensions	Net Weight
HWY-1000	1,500 lb. (680 kg)	1,265 lb. (574 kg)	1,000 lb. (454 kg)	18.5 in. (470 mm)	6.5 in. (165 mm)	50 in. (1,270 mm)	4.8-12	L: 98 in. (2,489 mm) W: 57.5 in. (1,460 mm)*	265 lb. (120 kg)
4 West	2,000 lb./axle (907 kg/axle)	3,000 lb. (1,361 kg)	2,570 lb. (1,166 kg)	21.25 in. (540 mm)	8 in. (203 mm)	55.25 in. (1,403 mm)	B78-13	L: 91 in. (2,311 mm)** W: 61.25 in. (1,556 mm)	430 lb. (195 kg)
HWY-224	3,500 lb. (1,588 kg)	2,960 lb. (1,343 kg)	2,650 lb. (1,202 kg)	18.5 in. (470 mm)	7.25 in. (184 mm)	52 in. (1,321 mm)	B-78-13	L: 105 in. (2,667 mm) W: 59.5 in. (1,511 mm)*	320 lb. (145 kg)

Trailer accessories

Dual Hitch #300 831
For HWY-1000, and HWY-224. Combination 2-inch (50 mm) ball and 3-inch (76 mm) lunette eye in one reversible assembly.

Cable Tree
#195 023 *For HWY-1000.*
#043 826 *For HWY-224.*
Provides an area to conveniently wrap weld cables and extension cords.

Fender Kit #300 160
Replacement fenders for HWY-224.

Load Banks

LBP-350 #043 329
Designed to provide an adjustable load for troubleshooting or calibrating welding power sources or generators. Standard equipment includes analog meters for both AC and DC output with jacks for external metering connections. It comes with a 13-foot (4 m) 115-volt power cord and has seven 50-amp load switches, providing a maximum capacity of 350 amps.

Welding Power Load Bank #902 804
Designed to load test the output of transformer-type, engine- or motor-driven generator welding power sources. This unit can be used to test AC or DC welder outputs, and to demonstrate welding equipment to customers.

MIG Accessories

Gun and Machine Accessory Kits

MIGmatic™ M-Series Gun Consumable Kits
#234 607 .023 in. (0.6 m) wire *For M-100/M-150.*
#234 608 .030 in. (0.8 m) wire *For M-100/M-150.*
#234 609 .035 in. (0.9 m) wire *For M-100/M-150.*
#234 610 .030 in. (0.8 m) wire *For M-25.*
#234 611 .035 in. (0.9 m) wire *For M-25.*
#234 612 .045 in. (1.2 m) wire *For M-25.*
M-100/M-150 kits contain 10 contact tips, 1 tip adapter and 1 standard nozzle. M-25 kits add 1 nozzle adapter.

Aluminum Conversion Kit #172 136
For M-25 gun. Allows 10-foot (3 m) guns to feed 3/64-inch (1.2 mm) aluminum wire.

#300 405 kit shown.

Industrial MIG 4/0 Kit
#300 390 *For single feeders.*
#300 957 *For dual feeders.*
Consists of flowmeter regulator with 10-foot (3 m) gas hose, 10-foot (3 m) 4/0 feeder weld cable with lugs, and 15-foot (4.6 m) work cable with 600-amp C-clamp. Dual kit comes with two flowmeter regulators and gas hoses.

Industrial MIG 4/0 Kit with Dinse Connectors
#300 405 *For single feeders.*
#300 956 *For dual feeders.*
Same as above except weld and work cables have Dinse-style connector on one end instead of lug.

Shopmate 300 MIG Kit #300 150
Includes flow gauge regulator and 10-foot (3 m) gas hose for argon or AR/CO_2 mix, 10-foot (3 m) 1/0 interconnecting cable, 15-foot (4.6 m) 1/0 work cable with clamp, and consumable storage box.

Protective Covers

#301 333
For Millermatic 125 Hobby.

#301 262
For Millermatic 141, 190, and 211.

#195 142
For Millermatic 212 Auto-Set, 252, 350P/350P Aluminum, and Syncrowave 210. Features side pocket.

Accessories

Plasma Cutter Accessories

Automation Kits

Automation Kit for Spectrum 625 X-TREME #301 158
Upgrades new quick-connect hand-held torch packages to add machine torch capabilities. Includes new front panel with built-in remote control cable receptacle. Machine torches are NOT included in kits and must be ordered separately.

#301 157 kit shown.

Automation Kits for Spectrum 875 and 875 Auto-Line
#301 156 *For 875.*
#301 157 *For 875 Auto-Line.*
Automation kits upgrade hand-held torch packages to add machine torch capabilities. Automation kit for Spectrum 875 Auto-Line **(#301 157)** includes a remote pendant control for manual on/off. Machine torches are NOT included in kits and must be ordered separately.

Cables and Cable Covers

Flexible Work Cable
#234 838 20 ft. (6.1 m)
#234 930 50 ft. (15.2 m)
Work cable with quick connect and heavy-duty clamp.

Cable Covers
#239 642 20 ft. (6.1 m)
#231 867 25 ft. (7.6 m)
#231 868 50 ft. (15.2 m)

Cutting Guides

Plasma Circle-Cutting Guides #253 055
For XT30C, XT30, XT40 and XT60. Cut straight lines or circles up to 12 inches in diameter.

Suction/Magnetic Pivot Base #195 979
Add this to your cutting guide for convenient attachment to all flat surfaces. The extended arm accommodates holes up to 30 inches in diameter.

Plasma Standoff Roller Guide #253 054
Helps maintain recommended standoff distance to maximize cutting performance and improve tip life.

Filters

In-Line Air Filter Kit #228 926
For 375 X-TREME, 625 X-TREME, 875, and 875 Auto-Line. Mounts to back of the plasma cutter. Includes male and female 1/4-inch NPT quick-disconnect fittings and hose for easy on/off connection. The replaceable filter element **(#228 928)** filters to .85 microns for removal of 99.9 percent of water, dirt and oil.

RTI Filter and Bracket #300 491
For 875 and 875 Auto-Line. Dryer will remove water, dirt and oil as small as one micron with 99.9 percent efficiency. Can be mounted on plasma cutter or on wall. Install as close as possible to point of air consumption. Replaceable filter element **(#212 771).**

Plugs and Cords

MVP™ Plugs

#219 258
For power cable 6-50P (230/240 V, 50 A).

#219 261
For power cable 5-15P (115/120 V, 15 A).

#219 259
For power cable 5-20P (115/120 V, 20 A).

For Spectrum 375 X-TREME, Millermatic 211, Maxstar 150 models, Diversion 180, and Multimatic 200. Allows connection of machine to 115/120-volt or 230/240-volt receptacles without tools – just choose the plug that fits the receptacle.

MVP™ Adapters

Female Receptacle

#254 328
For connection to 6-50P receptacle (240 V, 50 A).

#254 330
For connection to 5-15P receptacle (120 V, 15 A).

#254 331
For connection to 5-20P receptacle (120 V, 20 A).

For Spectrum 625 X-TREME. Allows connection of machine to 120- or 240-volt receptacles without tools – just choose the adapter cord that fits the receptacle.

Female Receptacle

Full KVA Adapter Cord #300 517
NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240-volt plug to common Millermatic and Spectrum 240-volt plug.

230-Volt Extension Cord #770 644
20-foot (6.1 m) NEMA 6-50P to NEMA 6-50R heavy-duty extension cord. 8-gauge cord has lighted ends that show power is on and a molded, integrated strain relief.

Protective Covers

#300 388
For Spectrum 875.

#300 184
X-CASE for Spectrum 375 X-TREME and 625 X-TREME, and Maxstar 150 models.

Torches

See your Miller® distributor for complete information on the following XT plasma torches and their consumables:

Spectrum Plasma Cutter Hand-Held Torches
For Spectrum 375 X-TREME
#249 949 12 ft. (3.7 m) XT30
For Spectrum 625 X-TREME
#260 633 12 ft. (3.7 m) XT40
#260 635 20 ft. (6.1 m) XT40
For Spectrum 875 and 875 Auto-Line
#249 953 20 ft. (6.1 m) XT60
#249 954 50 ft. (15.2 m) XT60

Spectrum Plasma Cutter Machine Torches
For Spectrum 625 X-TREME
#259 305 25 ft. (7.6 m) long body XT40M
#257 462 25 ft. (7.6 m) short body XT40M
For Spectrum 875 and 875 Auto-Line
#249 955 25 ft. (7.6 m) long body XT60M
#249 956 50 ft. (15.2 m) long body XT60M
#257 464 25 ft. (7.6 m) short body XT60M
#263 952 50 ft. (15.2 m) short body XT60M

Plasma Torch Consumable Kits
#253 520 *For XT30.*
#253 521 *For XT40.*
#256 033 *For XT60.*
#127 493 *Empty consumable box.*

Polarity Switches/Controls

Polarity Control #042 871
This dual-function control is designed for use with dual wire feeders or any application where electrical isolation and/or polarity reversing of weld current is required. Both functions can be used at the same time.

Process Selector Control #042 872
For CC, CV or CC/CV welding power source. Provides easy way to change welding process. Also includes features of Polarity Control.

Remote Controls

Also see Remote Controls in TIG Accessories on pages 112 and 113.

PRHC-14 Hand Control #195 511
For all solid-state power sources after serial number JK674521. Complete current or voltage control brings 120 volts of GFCI power to work area in a single cord. Housed in a durable and light aluminum case and includes 125-foot (38 m) cord with plugs.

Remote On/Off Control #242 197 025
For Deltaweld, Dimension 302/452, and Gold Star. Allows you to turn power source on or off from a distance of 25 feet (7.6 m). This is useful if power source is up in a mezzanine.

Stick Accessory Kits

No. 2 Stick Cable Sets
#195 196 15 ft. (4.6 m)
#300 836 50 ft. (15 m)
Consists of either 15- or 50-foot electrode cable with holder and work cable with clamp. 200 A, 100% duty cycle.

2/0 Stick Cable Set
#173 851 50 ft. (15 m), 350 A
#043 952 100/50 ft. (30/15 m), 300 A
Consists of either 50- or 100-foot 2/0 electrode cable with holder and 50-foot work cable with clamp. 100% duty cycle.

Weld Cables
#195 457 Cable with electrode holder
#195 458 Cable with work clamp
Consists of a stud/Tweco® adapter and 10-foot (3 m) 2/0 weld cable with a Tweco male connector and either an electrode holder or work clamp. Rated up to 400 A.

2/0 Weld Cable Extensions
#195 456 50 ft. (15 m)
#195 455 100 ft. (30 m)
Extends weld cables **(#195 457)** and **(#195 458)**.

Submerged Arc Accessories

Cables

Flux Hopper Extension Cables
#260 623 010 10 ft. (3 m)
#260 623 025 25 ft. (7.6 m)
#260 623 065 65 ft. (19.8 m)
Cable between SubArc Interface and flux hopper.

Motor Extension Cables
#254 232 005 5 ft. (1.5 m)
#254 232 010 10 ft. (3 m)
#254 232 025 25 ft. (7.6 m)
#254 232 065 65 ft. (19.8 m)
Cable between SubArc Interface and drive motor.

SubArc Control Cables
#260 622 030 30 ft. (9.1 m)
#260 622 050 50 ft. (15 m)
#260 622 080 80 ft. (24.4 m)
#260 622 100 100 ft. (30.5 m)
#260 622 120 120 ft. (36.6 m)
#260 622 200 200 ft. (61.0 m)
Cable between SubArc Interface and power source.

SubArc Parallel Cable
#260 775 015 15 ft. (4.6 m)

SubArc Tandem Cable
#260 878 015 15 ft. (4.6 m)

Torch Accessories

OBT 600 Torch Body Extensions
#043 967 1 inch (25.4 mm)
#043 969 2 inch (50.8 mm)
#043 973 4 inch (101.6 mm)
#043 975 6 inch (152.4 mm)

OBT 1200 Torch Body Extension #043 981
Overall length with extension is 9 inches (228.6 mm). Actual length of extension is 8.5 inches (215.9 mm).

OBT Torch Contact Tips

OBT 600	OBT 1200	Wire Size
#192 700	#192 141	1/16 in. (1.6 mm)
#192 701	#199 026	5/64 in. (2.0 mm)
#192 702	#192 142	3/32 in. (2.4 mm)
#192 703	#200 771	7/64 in. (2.8 mm)
#192 704	#192 143	1/8 in. (3.2 mm)
#192 705	#192 144	5/32 in. (4.0 mm)
#192 706	#192 136	3/16 in. (4.8 mm)

1200-Amp Torch Contact Tips

Single-Wire	Twin-Wire	Wire Size
–	#264 595	3/64 in. (1.2 mm)
#264 590	#264 596	1/16 in. (1.6 mm)
#264 591	#264 597	5/64 in. (2.0 mm)
#264 487	#264 588	3/32 in. (2.4 mm)
#264 593	–	1/8 in. (3.2 mm)
#264 594	–	5/32 in. (4.0 mm)

Wire Drive Assembly Accessories

Drive Rolls
#132 955 1/16 in. (1.6 mm)
#132 960 5/64 in. (2.0 mm)
#132 961 3/32 in. (2.4 mm)
#132 962 7/64 in. (2.8 mm)
#132 963 1/8 in. (3.2 mm)
#193 700 5/32 in. (4.0 mm)
#193 701 3/16 in. (4.8 mm)
V-knurled drive rolls for use with hard-shelled cored wires.

#301 138 slide shown.

Manual Slides
#301 137 Single slide, 7.87 in. (200 mm)
#301 138 Cross slide, 7.87 x 7.87 in. (200 x 200 mm)
Provides smooth and accurate movement of the welding heads. Single slide allows for 7.87 inch (200 mm) travel adjustment and cross slide allows for 7.87 x 7.87 inch (200 x 200 mm) with load capacity of 220 pounds (100 kg) at 1.64 feet (500 mm). ***Not recommended for tandem.***

Single-Wire Straightener #199 733
For SubArc Wire Drive 400 Digital Low Voltage and SubArc Wire Drive 780 Digital Low Voltage. For 1/16–3/16 inch (1.6–4.8 mm) wire.

Twin-Wire Straighteners (for Twin-Wire torches only)
#301 160 Single adjustment
#301 162 Double/separate adjustment

Wire Reel #108 008
Supports 60-pound (27 kg) coil of wire. Requires Spool Support Assembly **(#119 438)**.

TIG Accessories

High-Frequency Arc Starters and Stabilizers

HF251D-1
#042 388 115 V
HF251-2
#042 387 230 V
These portable 250-amp, 60 percent duty cycle units add high-frequency to the welding circuit to help start arc when using the TIG process.

Secondary Contactor Kit
#041 969 Field *For HF-251D-1.*
#041 906 Field *For HF-251-2.*
For power sources without a contactor. Mounts inside HF-251 cabinet.

Kits

#301 311 kit shown.

Contractor Kit
#301 311 TIG/stick pkg with RCCS-14 fingertip
#301 309 TIG/stick pkg with RFCS-14 HD foot pedal
For Maxstar 210/280 and Dynasty 210/280. All-in-one TIG/stick welding kit comes with either a RCCS-14 fingertip control **or** RFCS-14 HD foot control, Weldcraft™ A-150 TIG torch, 200-amp stick electrode holder with 15-foot (4.6 m) cable, 300-amp work clamp with 15-foot (4.6 m) cable, flow gauge regulator with 12-foot (3.7 m) gas hose, gas hose coupler, AK2C torch accessory kit, and TIG torch connector.

TIG Contractor Kit #301 287
For Multimatic 200. Kit comes with Weldcraft™ A-150 TIG torch with Dinse-style connector, RFCS-6M foot control, flow gauge regulator with 12-foot (3.7 m) gas hose, and AK2C torch accessory kit.

#300 990 kit shown.

Weldcraft™ Water-Cooled Torch Kits
#300 185 250 A, W-250 (WP-20)
#300 990 280 A, W-280 (WP-280)
#301 268 375 A, W-375
#300 186 400 A, W-400 (WP-18SC)
For Maxstar (except 150 models), Dynasty, and Syncrowave 250 DX/350 LX. Kit comes with 25-foot (7.6 m) TIG torch with Dinse-style connector (thread-lock on 400-amp kit), torch cable cover, work clamp with 15-foot (4.6 m) cable [12-foot (3.7 m) cable on 400-amp kit], flowmeter regulator with gas hose, and torch accessory kit.

Protective Covers

#300 579 and #195 478 covers shown.

#300 579 *For Diversion 165 and 180.*
#301 381 *For Maxstar 210.*
#301 382 *For Maxstar 280 and Dynasty 210/280.*
#195 142 *For Syncrowave 210.*
#195 320 *For Syncrowave 250 DX/350 LX.*
#195 478 *For XMT 304 and 350.*

Remote Controls

14-Pin to 6-Pin Adapter Cord
#300 507
For Maxstar 150 STL and STH, and Multimatic 200. 12-inch (305 mm) cord adapts Miller® 14-pin foot control or fingertip control to a 6-pin plug.

RCC-14 (14-pin plug) **#151 086**
East/west rotary-motion fingertip current/contactor control attaches to TIG torch using two hook-and-loop fasteners. Great for production or contractors that need quick ramp-up. Includes 26.5-foot (8 m) cord with plug.

RCCS-6M (6-pin plug)
#195 184 13.25 ft. (4 m) cord
#195 503 26.5 ft. (8 m) cord
For Maxstar 150 STL and STH, and Multimatic 200.
RCCS-RJ45
#301 146 13.25 ft. (4 m) cord
For Diversion 165 and 180.
RCCS-14 (14-pin plug)
#043 688 26.5 ft. (8 m) cord
North/south rotary-motion fingertip current/contactor control attaches to TIG torch using two hook-and-loop fasteners. Great for applications that require a finer amperage control. Includes cord with plug.

RFCS-6M (6-pin plug)
#195 183 13.25 ft. (4 m) cord
#195 504 20 ft. (6 m) cord
For Maxstar 150 STL and STH, and Multimatic 200.
RFCS-5 (5-pin plug)
#043 716 20 ft. (6 m) cord
RFCS-14 (14-pin plug)
#043 554 20 ft. (6 m) cord
Foot pedal current/contactor control. Includes cord with plug.

RFCS-14 HD (14-pin plug) **#194 744**
Heavy-duty foot pedal current/contactor control provides increased stability and durability from larger base and heavier cord. Reconfigurable cord can exit front, back or either side of the pedal for flexibility. Includes 20-foot (6 m) cord with plug.

RFCS-RJ45 #300 432
For Diversion 165 and 180. Foot pedal current/contactor control. Includes 14-foot (4.3 m) cord with plug.

RHC-14* (14-pin plug)
#242 211 020 20 ft. (6 m) cord
#242 211 100 100 ft. (30.5 m) cord
Miniature hand current/contactor control. Dimensions: 4 x 4 x 3.25 inches (102 x 102 x 82 mm). Includes cord with plug.
**For additional lengths visit MillerWelds.com/equiptoweld.*

RMLS-14 (14-pin plug) **#129 337**
Momentary- and maintained-contact rocker switch for contactor control. Push forward for maintained contact and backward for momentary contact. Includes 26.5-foot (8 m) cord with plug.

RMS-6M (6-pin plug) **#195 269**
For Maxstar 150 STL and STH.
RMS-14 (14-pin plug) **#187 208**
Momentary-contact switch for contactor control. Rubber-covered pushbutton dome switch ideal for repetitive on-off applications. Includes 26.5-foot (8 m) cord with plug.

RPBS-14 (14-pin plug) **#300 666**
Attaches to the TIG torch to remotely start and stop the TIG welding process. Includes 25-foot (7.6 m) cord with plug.

Wireless Remote Foot and Hand Controls

See literature no. AY/6.5 (Foot) and AY/6.6 (Hand)

Increases productivity, saves money, improves safety and easy to use.

Wireless foot control

Wireless 14-pin receiver (included with both systems)

Wireless hand control

Improves productivity and maneuverability by eliminating cord tangles. Reduces clean up time and work area cord clutter.

Improves safety by eliminating control cord and reducing potential trip hazard.

Improves reliability by eliminating control cord failure.

Multiple frequency sharing allows up to 20 systems to operate in a 90-foot (27.4 m) radius with accuracy and precision – and without delay, system interference, or crosstalk.

Easy-to-install receiver plugs directly into the 14-pin receptacle of Miller® machines.

Easily programmable. Control can be quickly and easily paired with any other Miller 14-pin wireless receiver. (Control is preprogrammed when purchased with the receiver.)

Foot control

Foot control is designed specifically for TIG welding in manufacturing, fabrication and plant applications, allowing operator to adjust amperage at point of use without the limitations of remote cord.

Auto on feature extends the battery life up to 250 hours of welding without turning the pedal on and off.

Easy-Glide Wear Pads™ glide across concrete, making it easy to reposition the pedal for comfort and speed.

**Some applications are not suitable for wireless communication. Keep in mind that the rated range is subjective, and depends on factors such as obstructions, frequency interference, transmission technology, and weather. The figures listed assume ideal conditions are present.*

Hand control

Hand control is designed for stick, TIG, MIG and flux-cored welding, allowing operator to adjust parameters for different joint configurations, electrodes and wire types/sizes at the point of use instead of walking back to the machine.

Allows parameter adjustments up to 300 feet away from welder without returning to machine.

Improves weld quality. Operators can adjust their machines to optimize the parameters for different joint configurations, electrodes, and wire types and sizes.

Smart Touch™ **buttons** allow quick and accurate machine parameter adjustments.

Digital meter display allows presetting percentage of machine output before welding, and viewing amperage and voltage while welding.

Industrial

Processes

▪ TIG (GTAW) ▪ Pulsed TIG (GTAW-P)

The following processes are with hand control only

▪ Stick (SMAW) ▪ MIG (GMAW)*
▪ Flux-cored (FCAW)

**Only with voltage-sensing feeder.*

Comes complete with

- Wireless foot control (#300 429) or hand control (#300 430) transmitter
- Wireless 14-pin receiver (#300 722)
- Battery box (#249 297)
- Three AA batteries
- Four Easy-Glide Wear Pads™ (foot control only) (sold individually, #248 274)
- Belt clip (hand control only) (#249 233)

Suggested power sources

WIRELESS REMOTE COMPATIBLE

Look throughout this catalog for the icon above signifying compatibility with a wireless remote. For a complete power source compatibility list visit **MillerWelds.com/wireless**.

Model/Stock Number	Component	Power Supply	Battery Life	Rated Range*	Temperature	Radio Frequency	RF Power	Antenna	Dimensions	Weight
Wireless Foot Control System (#300 429)	Foot control (transmitter)	Three AA batteries	250 hours	90 ft. (27.4 m)	-13° to +158°F (-25° to +70°C)	2.4 Ghz (ISM band)	<3 mW	Internal	H: 6 in. (152 mm) W: 5.75 in. (146 mm) D: 11.5 in. (292 mm)	3 lb. (1.4 kg) w/batteries
Wireless Hand Control System (#300 430)	Hand control (transmitter)	Three AA batteries	250 hours	300 ft. (91 m)					H: 5 in. (127 mm) W: 2.75 in. (70 mm) D: 1.375 in. (35 mm)	0.6 lb. (0.27 kg) w/batteries

TIG Accessories (continued)

Torch and Weld Cable Connectors

Air-Cooled TIG (GTAW) Torch Connectors

#195 234[1,2]
For Maxstar 150 and Multimatic 200.
25 mm (small) Dinse-style gas thru for one-piece air-cooled torches.

#194 723 A-200 (WP26)
#194 722[2] All others
For Syncrowave 210. 50 mm Dinse-style gas thru for one-piece air-cooled torch.

#195 379 A-200 (WP26)
#195 378[2] All others
For CST 280, Maxstar 210/280/350, Dynasty 210/280/350, and Syncrowave 250 DX/350 LX.
50 mm Dinse-style for one-piece air-cooled torch.

Water-Cooled TIG (GTAW) Torch Connectors

50 mm Dinse-Style Flow Thru
#195 380
For Syncrowave 210.
Used with all Weldcraft™ water-cooled torches.

50 mm Dinse-Style with Water Return Line #195 377
For Maxstar 210/280/350, Dynasty 210/280/350, and Syncrowave 250 DX/350 LX.
Used with all Weldcraft™ water-cooled torches.

50 mm Thread-Lock-Style
#225 028
For Maxstar/Dynasty 700.
Used with all Weldcraft™ water-cooled torches.

Thread-Lock-Style Weld Cable Connectors
#225 029
For Maxstar/Dynasty 700.
Contains two male connectors that accept #1/0 to #4/0 AWG size cable.

[1] *Except A-200 (WP26) torch.* [2] *A-80 (WP24) torches require* ***24-5*** *adapter.*

Wire Feeder Accessories

Extension Cables (14-Pin)

8-Conductor Cables*
#242 208 025 25 ft. (7.6 m)
#242 208 050 50 ft. (15 m)
#242 208 080 80 ft. (24.4 m)
For XR-Control, SuitCase 12RC feeder, 20 Series feeders, and 70 Series (S/D/DX model) feeders. For 14-pin remote controls/24 VAC wire feeders. 14-pin plug to a 14-pin socket. (Not for 115-volt XR or 50 Series feeders.)

11-Conductor Cables*
#247 831 025 25 ft. (7.6 m)
#247 831 050 50 ft. (15 m)
#247 831 080 80 ft. (24.4 m)
For XR-AlumaFeed, MPa Plus feeders, and 60M feeders. Eleven conductors to support contactor control and remote voltage control on all Miller® electronic CV 14-pin power sources. Additional functions supported when using the Invision MPa or XMT MPa power sources include synergic pulsed MIG, remote process select and side select capabilities.

14-Conductor Cables*
#242 205 025 25 ft. (7.6 m)
#242 205 050 50 ft. (15 m)
#242 205 080 80 ft. (24.4 m)
For HDC and WC-115 weld controls, XR-Control prior to serial number KK309906, and 50 Series feeders. Fully-loaded 14-pin extension cables for remote controls, and 24-volt and 115-volt feeders.

**For additional lengths visit MillerWelds.com/equiptoweld.*

Power Supply Adapter

PSA-2 Control #141 604
Required when using SuitCase 12RC, 20 Series, and 70 Series feeders with power sources having only 115-volt power available. Control is equipped with a 14-pin receptacle and a 10-foot interconnecting cable with Hubbell connections for older-style power sources. Can also be used with competitive power sources requiring a contact closure for contactor control.

PSA-2 Extension Cord #047 813
25-foot (7.6 m) cord extends 10-foot (3 m) cord supplied with PSA-2 control (4-pin to 4-pin connection).

Spool Adapter

#047 141
For use with 14-pound (6.4 kg) spool of Hobart or Lincoln self-shielding wire.

Spool Gun Controls and Kits

For more information see literature no. M/1.5, M/1.73 and M/1.76.

SGA 100 #043 856
Required to connect Spoolmate 3035 spool gun to any Millermatic 141, 190, or 211. Also allows connection to virtually any similar MIG welder – Miller or other brands. Includes 10-foot (3 m) 115-volt power cable with plug, 6-foot (1.8 m) interconnecting cable, and 5-foot (1.5 m) gas hose.

SGA 100C #043 857
SGA with contactor required to connect Spoolmate 3035 spool gun to CV engine drives like the Miller Bobcat. Includes 10-foot (3 m) 115-volt power cable with plug, 6-foot (1.8 m) interconnecting cable, and 5-foot (1.5 m) gas hose.

WC-115A Weld Control
#137 546 Without contactor
#137 546-01-1 With contactor
Operates on 115-volt power and designed primarily for constant-current DC power sources. Can also be used with constant-voltage power sources or DC engine drives supplying 115 volts. Used with a CC source, the control circuit functions in a voltage-sensing mode and with a CV source, it functions as a constant-speed circuit. Includes wire run-in and drive motor acceleration controls which ensure optimum arc starting performance.

WC-24 Weld Control
#137 549
For Spoolmate 200 and Spoolmatic/Spoolmatic Pro. Easily mounts on power source. Designed for use with Miller CV power sources with 14-pin receptacles and supplying 24 VAC.

Spool Gun Extension Hose and Cable Kits
#132 228 25 ft. (7.6 m)
#132 229 50 ft. (15 m)
For Spoolmatic/Spoolmatic Pro. Extends leads, etc. between spool gun and power source.

Turntable Assembly

#146 236
Allows feeder to rotate as operator changes work position. Reduces strain and bending of gun cable.

Wire Straightener

For 20 Series and 70 Series.
#141 580 For .035–.045 inch (0.9–1.1 mm) wire.
#141 581 For 1/16–1/8 inch (1.6–3.2 mm) wire.

Miller recommends

HOBART FILLER METALS

When people look for solutions, they turn to someone they can trust.

Finding the right filler metal solution for your welding needs is critical in an industry that is about getting the job done right. Every day, every project, every weld is another opportunity for Hobart to help you find the right filler metal solution—or create a new one.

To request a product catalog—
visit **HobartBrothers.com** or call **1-800-424-1543.**

Find *Your* Solution. Today.

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